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ACCREDITATION
Mt. San Antonio College is reviewed and accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges. This accreditation authorizes the College to offer courses that parallel the first two years of the curricula for state universities. The ACCJC can be contacted in writing at 10 Commercial Boulevard, Suite 204, Novato, California 94949 or by phone at (415) 506-0234.

CATALOG CONTENT CHANGES
Mt. San Antonio College has made every effort to assure the accuracy of the information in this Catalog. Students and others should note that policies, rules, procedures, and regulations change and that these changes may alter the information in this publication. This Catalog is not intended to be a complete statement of policies, rules, procedures, and regulations. More current or complete information may be obtained from the appropriate administrative office and the online version of this Catalog.

The College reserves the right to change, without notice, any academic or other requirement, course offering, or course content contained in this Catalog.

The 2008-09 Catalog does not constitute a contract or terms of a contract between the student and the College.

Mt. San Antonio College
1100 North Grand Avenue
Walnut, California 91789

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(Hearing Impaired)
Dream it, BE IT! ... at MT. SAC

At Mt. San Antonio College, we believe that if you can dream success, you can achieve it. That’s why this 2008-09 College Catalog promotes the theme, “Dream it, Be it!” Whatever your dream—a college degree or a new job skill—we stand prepared to provide you the quality instruction, the tools and the support services to fulfill it.

In this Catalog, you will find more than 200 degree and certificate programs, as well as a full range of basic skills and personal development courses. I encourage you to use the Catalog as your planning and resource guide to explore the vast scope of opportunities, services and programs that Mt. SAC offers.

We offer excellent university transfer, career and lifelong learning programs that empower you with the knowledge and skills needed to succeed in a diverse and interconnected world. Our curriculum is in step with the fast-changing needs of today’s dynamic employment sectors.

As the largest of California’s 109 community colleges, Mt. SAC regards itself as the “College of Champions.” In virtually every academic, athletic and cultural discipline, we have excelled to the top, garnering local, state, national and even international honors. We are very proud of these accomplishments and the distinction that both faculty and student efforts continue to bring to the College.

So go ahead and dream big!

MT. SAC BOARD OF TRUSTEES
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Dr. David K. Hall, Clerk
Rosanne Bader, Member
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Cheryl Jamison, Student Trustee

Dr. John S. Nixon
President/CEO
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2008-09 Mt. San Antonio College Catalog
2008-09 College Calendar

Fall 2008

July 4  Independence Day (campus closed)
July 7  International student admission application due for 2008 Fall Semester
July 23  Community Education Registration begins for 2008 Fall Semester
July 23 - August 20  Registration period for 2008 Fall Credit Classes
August 13 - 20  Wait List Registration Period for 2008 Fall Semester
August 13 - 20  August 24  Residency determination date
August 25  2008 Fall Semester begins
September 1  Labor Day (campus closed)
September 5  Last day to add a class
September 5  Last day to change residency for 2008 Fall Semester
September 12  Last day to withdraw without a "W" for 16-week classes
September 26  Last day to change grading option for 16-week classes
October 10  Last day to petition for Fall Semester and Winter Intersession graduation
October 31  Last day to withdraw from Fall Semester for 16-week classes
November 3  International student application due for 2009 Winter Intersession
November 11  Veteran's Day (campus closed)
November 19  Registration begins for 2009 Winter Intersession
           and 2009 Spring Semester Credit Classes
November 19  Community Education Registration begins for 2009 Winter Intersession
           and 2009 Spring Semester
November 27 - 30  Thanksgiving Recess (campus closed)
December 1  International student application due for 2009 Spring Semester
December 8 - 14  “Book Buy Back” at SacBookRac
December 8 - 14  Final Exams
December 14  2008 Fall Semester Ends
December 15 - January 1  Winter Recess for students
2008-09 College Calendar

Winter 2009

November 3, 2008  International students application deadline for Winter 2008
November 19, 2008  Online & telephone registration begins for Winter and Spring 2009

December 1  International student application deadline for Spring 2009
December 23  Telephone & online registration ends for Winter 2009

January 5  Winter Intersession begins
January 19  Martin Luther King, Jr. Day—(campus closed)

February 13  Lincoln's Birthday—(campus closed)
February 15  Winter Intersessions ends
February 16  Washington's Birthday—(campus closed)

Spring 2009

November 19, 2008  Online & telephone registration begins for Winter and Spring 2009

December 1  International student application deadline for Spring 2009

January 1  New Year's Holiday—(campus closed)

February 18  Online & telephone registration ends for Spring 2009
February 20  Flex/Staff Development Day
February 22  Residency determination date
February 23  Spring Semester begins
February 27  Spring application period ends

March 6  Last day to add a 16-week class
March 6  Last day to change residency for Spring 2009
March 13  Last day to withdraw Without a "W" for 16-week classes
March 27  Last day to change grading option for a 16-week classes
March 31  Cesar Chavez Day of Observance—(campus closed)
## 2008-09 College Calendar

### Spring 2009 (continued)

<table>
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<th>Date</th>
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<td>April 10</td>
<td>Last day to petition for June 2009 Graduation</td>
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<td>May 1</td>
<td>Last day to withdraw from Spring Semester</td>
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<td>May 4</td>
<td>International student application deadline for Summer Intersession 2009</td>
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<td>May 13 - 17</td>
<td>Online &amp; telephone registration begins for Summer 2009</td>
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<td>June 17</td>
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<td>August 2</td>
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The main College telephone number is (909) 594-5611.
After you have reached the College, dial your desired extension.
Section 1
The College
Mt. SAC has emerged as a leader in education not only in the San Gabriel Valley, but in the state. It is California’s largest, single-campus community college with a combined Credit, Continuing Education, and Community Service student enrollment of over 65,000. In 2006, Mt. SAC proudly celebrated 60 years of educational excellence. The College will continue to offer access to quality programs and services as well as provide an environment for educational excellence throughout the 21st Century.

MISSION, VISION AND VALUES

Mission
The mission of Mt. San Antonio College is to welcome all students and to support them in achieving their personal, educational and career goals in an environment of academic excellence.

Vision
It is the vision of Mt. San Antonio College:

To become a premier community college.

To be a leader in teaching, learning, programs and services.

To provide access to quality education, focusing on student success within a climate of integrity and respect.

To consistently exceed the expectations of our students, staff, and community.

Core Values

INTEGRITY
We treat each other honestly, ethically, and responsibly in an atmosphere of trust.

DIVERSITY
We respect and welcome all differences, and we foster equal participation throughout the campus community.

COMMUNITY BUILDING
We work in responsible partnerships through open communication, caring, and a cooperative spirit.

STUDENT FOCUS
We address the needs of students and the community in our planning and actions.

LIFELONG LEARNING
We promote the continuing pursuit of high educational goals through equal access to excellence in both teaching and support services.

POSITIVE SPIRIT
We work harmoniously, show compassion, and take pride in our work.

HISTORY
The Mt. San Antonio Community College District was created in December, 1945, when voters of four local high school districts approved the formation of a community college district. Initially known as Eastern Los Angeles County Community College, the institution was later renamed Mt. San Antonio College after the most visible snow-capped mountain (popularly known as Mt. Baldy) in the distance behind the campus.

The 421-acre campus was originally part of the 48,000-acre La Puente Rancho. During World War II, the facility was converted into an Army hospital and later a Navy hospital.

Mt. SAC opened in the fall of 1946 with 635 students occupying a few Spanish-tiled buildings and temporary Navy barracks clustered below the San Jose Hills. Walnut, not yet an incorporated city, consisted of very little except dirt roads, cacti, and grasslands covered in the spring with wild mustard grass.

Not surprisingly, the growth of Mt. SAC has mirrored that of the local area. The College now serves the communities of Baldwin Park, Bassett, Charter Oak, Covina, Diamond Bar, the southern portion of Glendora, Hacienda Heights, City of Industry, Irwindale, La Puente, La Verne, Pomona, Rowland Heights, San Dimas, Valinda, Walnut, and West Covina.
The College

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<th>BOARD OF TRUSTEES</th>
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<tr>
<td>President</td>
<td>Dr. Manuel Baca</td>
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<tr>
<td>Vice President</td>
<td>Fred Chyr</td>
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<td>Clerk</td>
<td>Dr. David K. Hall</td>
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<td>Judy Chen Haggerty, Esq.</td>
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<tr>
<td>Student Trustee</td>
<td>Cheryl Jamison</td>
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<td>College President</td>
<td>Dr. John S. Nixon</td>
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<td>Manager, Custodial Services</td>
<td>Ken McAlpin</td>
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<td>Assistant Director, Fiscal Services</td>
<td>Rosa Royce</td>
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<tr>
<td>Director, Food Services/Satellite Operations</td>
<td>Becky Carr</td>
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<tr>
<td>Director, Grounds and Transportation</td>
<td>Carol Baker</td>
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<tr>
<td>Director, Maintenance</td>
<td>Vacant</td>
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<tr>
<td>Director, Payroll</td>
<td>Donna Evans</td>
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<tr>
<td>Interim Director, Public Safety</td>
<td>Jeff Parker</td>
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<tr>
<td>Assistant Director, Public Safety</td>
<td>Michael Montoya</td>
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<tr>
<td>Director, Purchasing</td>
<td>Vacant</td>
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<tr>
<td>Director, Safety, Health Benefits, and Risk Management</td>
<td>Karen Saldana</td>
</tr>
<tr>
<td>Director, Technical Services</td>
<td>William Eastham</td>
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<tr>
<th>Human Resources</th>
<th>Ext. 4225</th>
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<tbody>
<tr>
<td>Interim Vice President, Human Resources</td>
<td>Dr. Jack Miyamoto</td>
</tr>
<tr>
<td>Director, Human Resources</td>
<td>Trinda Hoxie</td>
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<tr>
<th>Information and Educational Technology</th>
<th>Ext. 4357</th>
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<tbody>
<tr>
<td>Chief Technology Officer</td>
<td>Victor Belflinski</td>
</tr>
<tr>
<td>Director, Enterprise Applications Systems</td>
<td>Sheryl Hullings</td>
</tr>
<tr>
<td>Director, Academic Technology and Infrastructure</td>
<td>Dale Vickers</td>
</tr>
<tr>
<td>Assistant Director, Academic Technology and Infrastructure</td>
<td>Shanti Atashpoush</td>
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<tr>
<th>ADMINISTRATION (continued)</th>
<th>Ext. 4121/4215</th>
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<tr>
<td>President’s Office</td>
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<tr>
<td>Director, Marketing and Communication</td>
<td>Clarence Brown</td>
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<tr>
<td>Interim Executive Director, Mt. SAC Foundation</td>
<td>Richard Morley</td>
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<tr>
<th>Instruction</th>
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<tr>
<td>Vice President, Instruction</td>
<td>Dr. Virginia Burley</td>
</tr>
<tr>
<td>Interim Dean, Instructional Services</td>
<td>Dr. Deborah Boroch</td>
</tr>
<tr>
<td>Dean, Arts Division</td>
<td>Dr. Susan Long</td>
</tr>
<tr>
<td>Dean, Business Division</td>
<td>John Henese</td>
</tr>
<tr>
<td>Interim Associate Dean, Business Division</td>
<td>Richard Patterson</td>
</tr>
<tr>
<td>Director, Child Development Center</td>
<td>Janette Henry</td>
</tr>
<tr>
<td>Dean, Humanities and Social Sciences Division</td>
<td>Dr. Stephen A. Runnebohm</td>
</tr>
<tr>
<td>Associate Dean, Humanities and Social Sciences Division</td>
<td>James Jenkins</td>
</tr>
<tr>
<td>Dean, Library and Learning Resources Division</td>
<td>Vacant</td>
</tr>
<tr>
<td>Director, Learning Assistance Center</td>
<td>Meghan Chen</td>
</tr>
<tr>
<td>Dean, Natural Sciences Division</td>
<td>Larry Redinger</td>
</tr>
<tr>
<td>Interim Associate Dean, Natural Sciences Division</td>
<td>Matthew Judd</td>
</tr>
<tr>
<td>Dean, Physical Education Division</td>
<td>Deborah Blackmore</td>
</tr>
<tr>
<td>Director, Physical Education/Wellness Programs</td>
<td>Joseph Jennum</td>
</tr>
<tr>
<td>Dean, Technology and Health Division</td>
<td>Dr. Sarah Daum</td>
</tr>
<tr>
<td>Associate Dean, Technology and Health Division</td>
<td>Jemma Blake-Judd</td>
</tr>
<tr>
<td>Director, Nursing Program</td>
<td>Susan Chen</td>
</tr>
<tr>
<td>Dean, Community Education</td>
<td>Donna Burns</td>
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<tr>
<td>Director, Basic Skills</td>
<td>Madelyn Arballo</td>
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<tr>
<td>Director, Community Education and Contract Training</td>
<td>Gary Kay</td>
</tr>
<tr>
<td>Director, ESL and Intercultural Programs</td>
<td>Vacant</td>
</tr>
<tr>
<td>Assistant Director, ESL and Intercultural Programs</td>
<td>Liza Becker</td>
</tr>
<tr>
<td>Coordinator, ESL Curriculum and Assessment</td>
<td>Margaret Teske</td>
</tr>
<tr>
<td>Director, Grants</td>
<td>Adrienne Price</td>
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<tr>
<td>Director, Research and Institutional Effectiveness</td>
<td>Barbara McNeil-Staffard</td>
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<tr>
<th>Student Services</th>
<th>Ext. 4505</th>
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<tbody>
<tr>
<td>Vice President, Student Services</td>
<td>Dr. Audrey Yamagata-Noji</td>
</tr>
<tr>
<td>Dean, Counseling</td>
<td>Vacant</td>
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<tr>
<td>Associate Dean, Counseling</td>
<td>Thomas Mauch</td>
</tr>
<tr>
<td>Dean, Student Services</td>
<td>Carolyn Keys</td>
</tr>
<tr>
<td>Dean, Enrollment Management</td>
<td>Dr. George Mauch</td>
</tr>
<tr>
<td>Assistant Director, Admissions and Records</td>
<td>Patricia Montoya</td>
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<tr>
<td>Director, Upward Bound</td>
<td>Juan Carlos Astorga</td>
</tr>
<tr>
<td>Coordinator, CallWorks/CARE</td>
<td>Vacant</td>
</tr>
<tr>
<td>Director, Assessment and Matriculation</td>
<td>James Ocampo</td>
</tr>
<tr>
<td>Director, Career and Transfer Services</td>
<td>Heidi Lockhart</td>
</tr>
<tr>
<td>Director, Disabled Student Programs and Services (DSP&amp;S)</td>
<td>Grace Hanson</td>
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</table>
INSTRUCTIONAL DIVISIONS (continued)

Community Education Division
Donna Burns, Dean
The Community Education Division provides a range of courses serving students and community members enrolled in noncredit courses and programs. Mt. San Antonio College provides matriculation services to assist individuals seeking to enter the workforce or access further education in the following categories: Basic Skills, English as a Second Language, Programs for Adults with Disabilities, Citizenship, Parenting, and Short-term Vocational Programs. Community Education houses additional programs and resources as follows: The Language Learning Center, offering resources for learning new languages; the Older Adult Program promoting lifelong learning and ongoing career skills training; the Training Source that provides customized on-site courses for a variety of organizations; and the Health Careers Resource Center for health-related skills development. For additional information on courses, services, and programs offered, contact the division office at ext. 4220.

Humanities and Social Sciences Division
Dr. Stephen Runnebohm, Dean
James Jenkins, Associate Dean
The Humanities and Social Sciences Division is composed of eight departments: American Language; Communication; English, Literature and Journalism; Foreign Languages; History, Art History, Geography and Political Science; Psychology and Education; Sign Language; and Sociology, Philosophy. The division sponsors interdisciplinary and national award-winning programs and publishes the student newspaper, The Mountaineer, through journalism courses. The division also supports a nationally ranked forensics program, a successful study abroad program, and the Teacher Preparation Institute. For additional information, contact the division at ext. 4570.

Library and Learning Resources Division
Dean (vacant)
Meghan Chen, Director, Learning Assistance Center
The Library and Learning Resources Division includes Learning Assistance, Library, Media Services, Tutoring Services, and Distance Learning. Housed in the Learning Technology Center, the various departments provide support services for all students at the College.

Departments
Distance Learning ......................................................... Ext. 5658
Learning Assistance .................................................. Chair, Pat Bower, Ext. 4304
Library ........................................................................... Chair, Emily Woolery, Ext. 4264
Media Services ................................................................. Ext. 4270
Tutoring ....................................................................... Ext. 6605
The Technology and Health Division provides 31 certificates and 31 degrees in occupational and vocational programs in the areas of technology, public services, and health care. The programs offer a variety of Associate in Science Degrees and certificates leading to job placement, transfer, and updating of skills. Programs offered in technology include Aeronautics, Air Conditioning and Refrigeration, Aircraft Maintenance, Architecture and Engineering Design, Electronics Technology, Travel, Water Technology, and Welding. The Public Services Programs include Fire Technology, Administration of Justice, Correctional Sciences, and Alcohol and Drug Counseling. Health Care Programs include Medical Services, Mental Health, Radiologic Technology, Respiratory Technology, and Nursing. The Associate Degree Nursing program provides quality preparation for students seeking a career as a Registered Nurse. Programs are driven by industry needs, and many are governed by State accrediting boards. In addition, the division includes The Regional Health Occupations Resource Center (RHORC) and the RHORC at ext. 6108. For additional information, contact the division at ext. 4750.

Physical Education Division
Larry L. Rodinger, Dean
Matthew Judd, Interim Associate Dean

Mt. San Antonio College has been a leader among community colleges for over 50 years. Our strong commitment to Physical Education, Athletics and Dance is exhibited by our dedication to the health and well being of our students and our community. Our comprehensive class offerings, certificate programs, Fire and Law Testing (PAT)/Conditioning Program, Dance Productions, Athletic Programs and Athletic Special Events demonstrate this commitment.

Mt. SAC is home to one the nation's largest and most successful community college athletic programs for men and women. The Championship Winning Athletic Program offers 22 individual sports and is an integral part of the College's overall educational offerings. Mt. SAC Student/athletes excel on the field and in the classroom. Our "WIN" academic support program provides testing, tutoring and counseling services for all our student/athletes and serves as the "model" academic support program for all community colleges.

Mt. SAC's five "world famous" annual athletic special events—the Mt. SAC Relays, Mt. SAC Cross Country Invitational, Footlocker Western Regional Cross Country Championship, AAF Youth Days Program and the International Pole Vault Camp—reach over 100,000 participants, coaches and spectators, generating millions of dollars into the local economy.
Section 2
Matriculation Services:
Admissions and Registration
Assessment and Placement Orientation
Counseling/Advisement
Matriculation

ADMISSION AND REGISTRATION

Admissions
Admission to Mt. San Antonio College includes the filing of an application for admission by the student and the filing of transcripts from high school or college(s). It is the student’s responsibility to request official transcripts from the last high school attended and any college(s) attended. Transcripts will be reviewed to determine eligibility for courses at Mt. SAC.

Application to the College
All inquiries regarding admission to the college should be directed to the Admissions and Records Office. Admission is granted only by filing an official application for admission using one of the following methods:

1. The application for admission of credit classes can be submitted online. To access the online application, visit the Mt. SAC Admissions Website at [http://admissions.mtsac.edu](http://admissions.mtsac.edu) and click on the online application link at the top of the web page.

2. Applications for admission to credit classes are available at the Admissions and Records Office and are also included in each Mt. San Antonio College Schedule of Classes. You may submit this application in person or mail it to:
   Admissions and Records
   Mt. San Antonio College
   P.O. Box 910, Walnut, CA 91788-0910.

Residency Requirements (for fee purposes)

Residency Guidelines
This statement is a general summary of the principal rules of residency and their exceptions and should not be construed as the actual expression of the laws used by the Mt. San Antonio College Admissions Officer for residency determination. Reference should be made to Chapter 1 (commencing with Section 68000) of Part 41 of Division 5 of the Education Code, regulations of the Board of Governors of the California Community Colleges in Chapter 1 (commencing with Section 54000) of Division 5 of Part VI of Title 5 of the California Administrative Code, and the regulations and guidelines available in the Admissions and Records Office.

Residence Classification
Each person enrolled in or applying for admission to Mt. San Antonio College will, for purposes of admission and/or tuition, be classified as a “resident,” or a “non-resident.”

1. Resident: A “resident” is a person who is eligible to establish California residency for tuition purposes or who has resided within California for at least one year and who has established a legal residence in California prior to the residency determination date.

2. Non-resident: A “non-resident” student is one who has not resided in the State for more than one year prior to the residency determination date and who has not established legal residence or who is not eligible to establish California residency for tuition purposes.

Criteria for Determination of Legal Residence
To determine a person’s place of residence, reference is made to the following:

1. Every person has, in law, a residence.

2. Every person who is married* or 18 years of age or older, and under no legal disability to do so, may establish residence.

3. In determining the place of residence, the following rules are to be observed:
   a. There can be only one residence.

   b. A residence is the place where one remains when not called elsewhere for labor or other special or temporary purposes, and to which that person returns in seasons of repose.

   c. A residence cannot be lost until another is gained.

   d. The residence can be established and/or changed only by the union of act and intent.

   e. A man or a woman may establish his or her residence. Thus, it is possible that a woman who is married to, and living with, her husband may have a residence separate from his. A woman’s residence shall not be derivative from that of her husband.

   f. The residence of the parent with whom an unmarried minor child maintains his/her place of abode is the residence of the unmarried minor child. When the minor lives with neither parent, his or her residence is that of the parent with whom he/she maintained his or her last place of abode; however, the minor may establish his or her own residence provided both parents are deceased and a legal guardian has not been appointed.

   g. The residence of an unmarried minor who has a living parent cannot be changed by his or her own act, by the appointment of a legal guardian, or by relinquishment of a parent’s right of control, unless the student qualifies for the self-supporting exception.

Burden of Proof
The burden of proof is on the student to clearly demonstrate both physical presence in California and intent to establish California residence.

Residence Classification Appeal
Any student, following a final decision on residency classification by the Admissions and Records Office, may make written appeal to the Appeals Committee of Mt. San Antonio College within 30 calendar days of notification of final decision regarding classification.

Concurrent Enrollment for K-12 Students (College Starter)
The College Starter program is designed for gifted high school juniors and seniors (11th and 12th grades) who would benefit from taking advanced scholastic or vocational work at Mt. San Antonio College. Students must meet the following criteria to participate in the College Starter program:

1. Be recommended by their high school principal or counselor;

2. Be approved to participate by their parents;

3. Have a 2.0 cumulative high school grade point;

4. Meet all course prerequisites;

5. Juniors will only be allowed to enroll in a single course. Seniors wishing to enroll in two courses must have a 3.0 grade point average or above.

College Starter application packets may be obtained in the Counseling and Advising Services office or online at [http://testing.mtsac.edu/students/admissions/college_starter.html](http://testing.mtsac.edu/students/admissions/college_starter.html)

Only college level courses may be taken as part of the College Starter program. Students preparing to complete the CASHEE examination are exempted from this limitation. Students needing to make up a high school deficiency can apply to participate in the High School Referral Program. Please go to the Community Education Center in Building 30.

A parent/guardian approval form allowing the student to participate must be submitted as part of the application process. Parents must acknowledge that their student will be instructed in an adult environment and that the student will be expected to conform to all college policies.

Students who have previously enrolled and who have dropped their courses and/or have not made satisfactory progress will not be allowed to continue their participation in the College Starter program.

Students enrolled in grades 10 and earlier may be considered for limited enrollment. To participate, students must meet the following criteria:

1. Be recommended by their high school principal or counselor;

2. Be approved to participate by their parents;

3. Have a C+ average/2.5 cumulative school grade point;

4. Meet all course prerequisites;

5. Take the Mt. SAC placement test in English and Reading.

Students must meet the Dean of Counseling to secure permission to participate.

College credit will be earned as a result of taking courses at Mt. San Antonio College and those grades will become part of the student’s permanent college record. High school credit may be possible at the discretion of the receiving high school. Please speak to your high school counselor.

*A minor, married but subsequently divorced, retains the capacity to establish his or her own residence. An annulment of the marriage (a determination that in effect the marriage never took place) will require that the minor be treated like any other minor.
Evaluation of Other College Coursework
Mt. San Antonio College reserves the right to evaluate work completed in other regionally accredited colleges and universities. Transfers with acceptable grades will be granted advanced standing insofar as the work corresponds with the curriculum of this institution or the lower-division work offered in accredited colleges or universities. Each applicant should file with Admissions and Records an official transcript of their records from all colleges and universities previously attended. This material should be furnished at least two weeks prior to registration. For information regarding military credit, see Section III in this Catalog.

It is the student's responsibility to request the evaluation of official transcripts from other colleges. This may be accomplished by submitting a completed "Evaluation Request" form at Admissions and Records.

Students planning to use courses taken at other colleges for placement in Mt. San Antonio College courses who did not have transcripts sent to Admissions and Records must bring official copies of their transcripts at the time they register. Transcripts may also be required at the first class meeting.

Transcripts submitted for admission become the property of Mt. San Antonio College and cannot be returned to the applicant or forwarded to other institutions.

Acceptance of Domestic Coursework from Accredited Colleges and Universities in the United States
The College will accept "degree appropriate" or "baccalaureate" level courses from accredited colleges and universities in the United States.

To determine General Education and/or Associate Degree equivalency and for granting of unit credit, the course must be easily identifiable as the same course taught at Mt. San Antonio College by a commonly used course prefix, title, and description. To be verified, sufficient information, including prerequisite information, must be available from the accredited college/university to substantiate granting course equivalency and course credit. The College reserves the right to deny acceptance of any course for the purpose of General Education, Associate Degree requirements, or subject requirements. If denied, the student may petition for an in-depth evaluation but will be required to provide official course information from the institution of record or from the college/university catalog.

To determine "subject" requirements for an established vocational program, the course must be evaluated by a representative from the respective academic department in which the major resides. If the course is determined acceptable as a substitution for a required course in the program, the department representative will complete a "variance" form verifying this acceptance and complete the paperwork at Admissions and Records.

Articulation with High Schools, ROPs, and Adult Schools
Articulation Agreements with secondary schools (high schools, Regional Occupational Programs and Adult Education) are established annually during the fall and are valid for the current school year. Articulation is a faculty driven process with three possible methods of rewarding student achievement in the Career Technical Education courses taken at the secondary level. The three types of articulation include Project Credit, Course Equivalency and College Units of Credit.

Project Credit is the minimum level of articulation and results in a certificate to be submitted in a specified college course in lieu of a specific required project or projects. Course Equivalency recognizes the information gained from the secondary experience and allows students to use that experience to continue their career education by taking an advanced college level course. Project Credit and Course Equivalency articulation will not result in units of credit at the college.

College Units of Credit is the most common form of articulation between the college and secondary schools. Students participating in these agreements must meet an exam requirement as stated in California Code of Regulations, Title V. Students that successfully meet the exam requirement and supply the correct paperwork will be awarded a grade and units of credit. The credits will appear with a notation of "by exam" on a Mt. SAC transcript in the semester closest to the completion of their secondary course.

Articulation with secondary programs is a time sensitive process. Secondary students must complete the required paperwork and pass required exams at the completion of their secondary course. If a course sequence is required at the secondary level, the student must request the units at the completion of the course sequence. The required paperwork must be submitted by the instructor of record on the Articulation Agreement within two months of course or sequence completion. Students may not seek college units retroactively.

Required paperwork includes:
- 2+2 Articulation Equivalency Form
- High School Transcript
- ROP/Adult Education Certificate of Completion

Forms are available from participating high school instructors. Secondary instructors submit all required paperwork to the Tech Prep office at Mt. San Antonio College. Articulation forms will be accepted from authorized secondary instructors only.

College credit issued by ROP and/or Adult Education centers will be accepted if the issuing programs is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) or the Senior College Commission, under the auspices of the Western Association of Schools and Colleges (WASC).

For more information on articulations with high schools, ROPs and adult schools, please contact the Tech Prep/Articulation Office, Bldg. T1A, at (909) 594-5611, ext. 5252.

Admission of International Students
Mt. San Antonio College encourages applications from students holding or attempting to obtain the F-1 Visa. The following items are required from international applicants:
- Mt. SAC Application for Admission
- International (F-1 Visa) Student Application
- Application processing fee of $50.00 (U.S.)
- Confidential Financial support documents
- TOEFL scores, admissions
- A ‘paper based’ TOEFL score of at least 450, “computer based” TOEFL score of at least 133, or an Internet-based score of at least 45.
- Copy of I-94
- Copy of I-20
- Transfer form
- TB (tuberculosis) test
- Proof of health insurance (prior to registration)
- Application (both college and International Student Application), and all supporting materials must be received on or before the term deadlines listed above. Students will be required to take the Assessment of Written English (AWE) when they arrive at Mt. San Antonio College. Applications received after the deadline will be considered for the following semester. The application fee must accompany the admission application.
Matriculation

Registration
Registration for classes is done online via the web at http://my.mtsac.edu or by touchtone telephone at (909) 595-MSAC (595-6722). Students who enrolled in the previous semester or session preceding the enrollment term are eligible to register for classes and will be mailed a Permit to Register at least two weeks prior to the beginning of registration. Mailing of Permits to Register for new applications is dependent on the date an application is submitted.

Students who do not receive a permit in the mail before the first day of registration may also check their date and time to register at http://my.mtsac.edu. Students should remember to update their mailing address at the above web site or at the Admissions and Records Office.

Schedule of Classes
The Mt. SAC Schedule of Classes, which indicates intended course offerings and teaching assignments for both credit, noncredit and community education courses, is published each semester. The credit course offerings are found in the front of the schedule, along with an admissions application for credit course offerings. The noncredit and community education course listing appears towards the back of the book and also includes the smaller noncredit/community education registration card. The combined Schedule of Classes is also available online on campus, on the Mt. SAC website (www.mtsac.edu) and at community libraries. The College reserves the right to cancel, reschedule, equalize, or combine classes and to change professors where such action is deemed necessary. Because of facilities limitations, any class section or program will be closed as soon as enrollment has reached the maximum designated for that class or program.

Enrollment Fees and Expenses
Students are charged an enrollment fee, an optional Student Activities Fee, a Student Health Services Fee, and for some classes Materials Fees for each semester at Mt. San Antonio College. These fees are subject to change. Please consult the latest Schedule of Classes for current fees and related information. Students must purchase their own textbooks and supplies. Expenses for books and supplies for full-time students may average $300 to $400 per semester depending upon the program of study selected.

Students wishing to park in the regular student parking lots are required to have a valid Student Parking Permit. The permit may be purchased at the time of registration or at the Bursar’s Office located in Building 9A.

Refund of Fees
To be eligible for a refund, students must complete and file a Request for Fee Refund form at the Bursar’s Office. The Request for Fee Refund form must be completed whether a class is dropped in person, online or by Telephone Registration. Requests for Fee Refund forms must be completed prior to the end of the second week of each semester for 16 week classes, and prior to the end of the first week for short-term classes. This refund period applies to the following fees:

- Enrollment Fee
- Student Activities Fee (optional)
- Student Health Services Fee
- Parking Fee (optional)
- Course Materials Fee

NO REFUNDS will be granted after the second week of the semester.

- Military Refund: In the case of students who are members of an active or reserve military unit and who receive orders compelling a withdrawal from courses, the College shall, upon petition by the affected student, refund the parking fee, health fee, materials fee, Student Activities Fee, entire enrollment fee and non-resident tuition fee unless academic credit is awarded.

NOTE: A $10 refund processing fee will be assessed to every refund where enrollment fees are being returned. The processing fee will not apply to refunds for college cancelled classes or special administrative drops.

Cancelled Classes
Classes may be cancelled at the discretion of the College. Students enrolled in such a class will be permitted to enroll in other open classes. Students who have a class or classes cancelled by the College because of low enrollment are eligible for a full refund of fees paid for those classes. To receive the fee refund, the student must complete and file a Request for Fee Refund at the Bursar’s Office. All applicable receipts, cards, and permits must be attached to the request form.

Student Obligations
Mt. San Antonio College will withhold grades, transcripts, diplomas, and registration privileges, or any combination thereof, from any student or former student who fails to pay a proper financial obligation due the College (e.g., returned check, unpaid enrollment fees, unpaid loan, equipment breakage, unpaid library fine, etc.). Any item or items withheld shall be released when the student satisfactorily meets the financial obligation.

There is a processing fee of $25 for returned checks or stop payment of checks.

Students having disciplinary obligations with the Student Life Office will not be allowed to transact College business until the obligation is met.

ASSESSMENT AND PLACEMENT
Most students attending Mt. San Antonio College are required to participate in assessment. The assessment and placement process has been established to enable all students an opportunity to achieve probable success in their course work. In addition, the process allows the faculty to instruct their courses at an appropriate level with the knowledge that students will be reasonably prepared.

Placement Tests
Placement tests are required for appropriate course placement. Students take placement exams for math, English and reading courses. Advanced level math placement exams should be taken when applicable to the student’s academic background and intended program of study.

English Placement
The College utilizes the Assessment of Written English (AWE) to evaluate students’ writing skills. Most students are required to have their English competency assessed prior to registration. Based on the assessment, students are placed in one of the following categories:

A. Eligible for English classes. Based on assessment results, students will be eligible for either ENGL 1A, 68, 67, or LERN 81.
B. Eligible for AMLA writing courses (designed for students who are not fluent in the English language). Students may enroll in AMLA writing courses and continue enrolling in AMLA writing courses until they are eligible for ENGL 67 or ENGL 68.
C. Eligible for ESL (English as Second Language) classes. Students may enroll in ESL adult education courses each semester until eligible for AMLA courses; then enroll in AMLA courses each semester until they are eligible for ENGL 67 or English 68.

Students in any of the categories listed above may enroll in other courses for which they are eligible. Students with limited English skills are not prohibited from enrolling in vocational courses.

Math Placement
The College utilizes a selection of assessment instruments to place students into math courses. Students take one of the math placement exams commensurate with their most recent, successful completion of Pre-Algebra, Algebra, Intermediate Algebra and Pre-Calculus.

Reading Placement
The College utilizes the Degrees of Reading Power (DRP) and COMPASS/ESL reading tests to assess student reading skills. Based on the results of the reading test, the student will be advised to take an appropriate reading course.

Retest Policy
Students may repeat a test once every three months. Under certain extenuating circumstances and with approval of the Director of Assessment and Matriculation, a test may be repeated prior to the three-month limit.
### Placemat Test and Eligibility Time Limits

Placement test scores are valid for two years from the date the test was taken. Eligibility based on test placement is not valid after the two-year expiration period. Eligibility based on previous coursework does not expire.

### Test Scores and Placement from Other Colleges
Math and reading test scores will be accepted from other colleges if that college uses the same test as Mt. SAC. Test scores from other college English tests are not accepted. Mt. SAC does not accept placement granted at other colleges.

### Appeals Process
Students may appeal their English and/or math placement if they can demonstrate alternate proof of course equivalency or competency. If extenuating circumstances exist that may affect course placement, students may seek consultation in the appropriate division office. Students should be prepared to present documentation such as high school or college transcripts, additional test results, or work experience.

### Ability to Benefit

Students applying for financial aid who have not acquired a high school diploma or GED must perform at a passing level on an Ability To Benefit test. The test is approved for use by the federal government, and passing scores have been established by the publisher. Wonderlic is the Ability to Benefit test administrator at Mt. SAC. Testing is conducted at the Assessment Center. For further information regarding Ability to Benefit regulations, contact the Financial Aid Office.

### Exemption from Assessment

Students are exempt from Assessment if they:
1. enroll in non-credit or community services classes only;
2. select and enroll in a general interest class which does not have prerequisites;
3. verify English or math eligibility based on course work at Mt. San Antonio College or other regionally accredited institutions;
4. verify other test scores accepted by Mt. San Antonio College.

### Orientation - Credit Students

Orientation is required for all new students who are enrolling in Mt. San Antonio College. This includes students who may want to take one course, or those who are transferring from another college. The only exception is for students who have a degree from an accredited college/university.

Orientation includes information regarding college programs, services, procedures, student responsibilities, and other related information. Students will have the opportunity to meet with a counselor or an advisor to develop a first semester educational plan.

The College has determined the importance of an orientation to college as a factor in success. Prospective students are urged to make an appointment for orientation immediately after filing an application and taking the necessary placement tests.

### Counseling/Advisement

Counseling and advising services are provided to matriculated students who are in need of additional assistance regarding course selection, major selection, and transfer information and planning. Students are encouraged to meet with a counselor during their first semester of enrollment to develop an Educational Plan. The Educational Plan lists the courses needed to complete a specific major, as well as identifying graduation and/or transfer requirements in general education.

Students who are undecided about their major and/or career and educational goals, should make an appointment with Counseling and Advising Services to meet with a counselor. Career counseling services are available to students at no cost, to assist students in making the most appropriate choices about their future.

<table>
<thead>
<tr>
<th>EXEMPTION FROM ORIENTATION AND COUNSELING/ADVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are exempt from Orientation and Counseling/Advisement if they:</td>
</tr>
<tr>
<td>1. enroll in non-credit or community services classes only;</td>
</tr>
<tr>
<td>2. possess an Associate or higher degree from an accredited institution;</td>
</tr>
<tr>
<td>3. attain 60 units or more from an accredited institution;</td>
</tr>
<tr>
<td>4. select and enroll in a general interest class only. All students must meet course prerequisites.</td>
</tr>
</tbody>
</table>

### Pre-Collegiate Basic Skills

Courses designated “Pre-Collegiate” develop basic skills in reading, writing, and mathematics. They will neither count toward graduation from Mt. San Antonio College, nor transfer to a baccalaureate institution.

### Prerequisites, Corequisites, and Advisories

Faculty at Mt. SAC have established prerequisites, corequisites and advisories for courses. If a student does not meet the prerequisite or corequisite requirements, the student will be blocked from enrolling in those courses. Transcripts and grade report cards from other colleges used to determine whether pre or corequisites have been met must be evaluated prior to registration.

### Matriculation

**Prerequisite**

Prerequisites to a course are those courses which must have been taken previously as preparation for the course. To enroll in a class that has a prerequisite, the required preparation must have been completed prior to enrolling in the course. In some instances, English and math prerequisites may be met by attaining eligibility through assessment. All course prerequisites listed must be completed with a grade of “C” or better, unless otherwise stated.

**Corequisite**

To enroll in a course that has a corequisite, the corequisite course must be taken concurrently. In some instances, a corequisite may have been taken previously.

**Advisory**

An advisory to a course is preparation which is highly recommended by faculty teaching the course. Although students may enroll in a course if they do not possess the advisory skills, they are encouraged to abide by an advisory whenever possible.

### Challenging Prerequisites and Corequisites

If a student believes that any of the following conditions exist with regard to an existing course prerequisite or corequisite, the student may obtain a Petition to Challenge form from the Counseling Office or Admissions and Records Office in the Student Services Building or from division offices.

- The prerequisite or corequisite has not been established in accordance with the College’s process for establishing prerequisites and corequisites;
- The prerequisite or corequisite is in violation of State Title 5 regulations;
- The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner;
- The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite;
- The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available; or
- Such other grounds for challenge as may be established by the district governing board.

The student must provide appropriate documentation when filing a challenge with the appropriate division office.

Documentation may include, but is not limited to, high school or college transcripts, additional test results, work experience, or an on-campus writing sample. Prior enrollment in the course does not exempt a student from the current prerequisite of that course.
Section 3
Academic Policies and Requirements
ATTENDANCE AND ENROLLMENT

Attendance
Students are expected to attend all class meetings. It is the students’ responsibility to know the attendance and absence policies of their professors.

Professors will take attendance at all class meetings. It is the responsibility of each professor to inform his/her classes of the attendance and absence policies at the beginning of each semester.

It is the student’s responsibility to officially drop a class whenever he or she determines that he or she can no longer attend the class. Failure to drop a class officially may result in a failing grade and/or a financial obligation to the college.

Instructors may drop students from their class rolls through the last day of the tenth week of instruction of a regular semester for excessive absence as defined by the instructor.

Students will be granted College-authorized absences for participation in the following activities:
1. Player participation in inter-collegiate athletics and activities.
2. Class-planned field trips.
3. Area and State student government conferences.
4. Class-planned and sponsored speech, art, drama, and music programs.

NOTE: To establish an official College-authorized absence, the professor must submit the students’ names to the Student Life Office.

Auditing Courses
Students may not audit courses at Mt. San Antonio College. All students must be officially enrolled in a course in order to attend that course.

Dropping Courses and Withdrawing from the College
For 16-week classes, students who drop a class, withdraw from College, or are dropped from a class by the professor during the first three (3) weeks of a regular semester will receive no mark(s) or notation(s) on their permanent record.

Students who drop a class, withdraw from College, or are dropped by the professor between the first day of the fourth week and the last day of the tenth week of instruction during a regular semester will receive a mark of “W” withdrawal on their permanent record.

Professors may not drop students from class, and students may not drop class(es) or withdraw from College after the last day of the tenth week in a regular semester. All students enrolled after the tenth week shall receive an academic grade (A, B, C, D, F, CR, NC) or an incomplete mark for the course.

In short-term courses, students who withdraw or are dropped from class during the first 20% of the course will receive no notation on their permanent record. Students may drop short-term courses only through 61% of the course.

A “W” withdrawal mark shall not be assigned to any student enrolled after the last day to drop except in the case of an approved petition because of extenuating circumstances. A “W” withdrawal remains a permanent part of a student’s academic record.

Student Unit Limits
Without petitioning, students may enroll in up to 18 units each semester and up to seven units each summer and winter session. Students who have completed a minimum of 15 college units in a given semester with a grade point average of at least 3.0 and have a minimum cumulative grade point average of at least 3.0 may petition for permission to enroll in units above the maximum.

Students may be required to see a counselor as part of the petition process. Petitions are available in the Counseling Office, located on the upper level of the Student Services Center.

Repeatable Courses
Certain courses may be taken more than once for credit. If the course is designated as repeatable, the course may be repeated only for the number of times allowable. In some cases, a group of courses may carry a collective limitation on the number of allowed repetitions for that entire group/cluster of courses (for example, when a similar educational activity is offered in beginning and advanced course levels.) To determine whether a course is repeatable, refer to Section 10, Course Descriptions, in this Catalog.

Repealing Courses Previously Passed
State Regulations do not allow students to repeat non-repeatable courses previously passed with satisfactory grades of “A,” “B,” “C,” or “Credit.” Students with extenuating circumstances may file a Petition for Exceptional Action in the Admissions Office. Students who are allowed to repeat courses based on this provision will not earn additional units or grade points toward improving or changing the previous grade earned in the class or toward changing the overall grade point average.

Petitions for Exceptional Action
Student Petitions for Exceptional Action forms are available from the Counseling Office and Admissions and Records Office in the Student Services Center. Students may complete these forms and submit them to Admissions and Records. Subsequent action on a petition will be taken either by the appropriate administrator or the Board of Appeals.

Limitations on Repeating Courses
Beginning with the Fall 1998 semester, students who have recorded either a substandard grade of either “D,” “F,” or “No Credit,” will only be allowed to repeat the same course twice. On repetition, the latest grade will count toward the grade point average and the previous grade will be discounted or forgiven. The student’s permanent academic record will be annotated such that all course work that has been taken and forgiven or repeated will remain legible, insuring a true and complete academic history. Unit credit is only allowed once when repeating a “D” grade.

After the first three weeks for a 16-week class in a regular term or after the first 20 percent of a short-term course, students shall be allowed a maximum of two withdrawals for a given course where a mark of “W” is posted for both withdrawals. In cases in which the student’s grade and/or withdrawal was the result of an extenuating circumstance, students may file a petition to repeat a class an additional time (whether the prior enrollment was due to a substandard grade or a withdrawal.) Extenuating circumstances are verified accidents, illnesses or other circumstances beyond the control of the student. When course repetition is approved pursuant to this provision, the previous grade and credit earned (if any) shall be disregarded in computing the student’s grade point average each time the course is repeated. Participation in an intervention program may be required.

Definitions
Primary Term: A primary term is either the Fall or Spring semester. In contrast, both Winter and Summer intersessions are not considered to be primary terms.

Continuing Student:

A continuing student is one who enrolls in at least one credit course and/or gradua

A continuing student retains rights to follow graduation and/or their permanent record.

Catalog Rights
This term is used to define the specific set of general education and other graduation requirements, as established in the catalog for a specific year, which the student must satisfy to qualify for a degree, certificate, etc.

Students may choose to qualify for graduation (general education and major) under the requirements in effect at either:
1. the time they entered the college, or
2. they may use any catalog thereafter, as long as the student maintains continuous enrollment. Continuous enrollment is defined as attendance during every primary term (Fall and Spring) after initial enrollment at Mt. San Antonio College.

Continuous Residence
A student will retain rights to follow Catalog requirements for the year they entered Mt. San Antonio College if, during every primary term after initial enrollment at Mt. SAC, he/she:
1. is enrolled in any credit class at Mt. SAC before the first four weeks; or
2. completes any units in a credit class at another accredited post-secondary institution; or
3. receives a waiver in advance or approval of a petition for exceptional action because of extenuating circumstances.
Academic Policies and Requirements

**GRADING SCALE**

<table>
<thead>
<tr>
<th>Evaluative Symbol</th>
<th>Definition</th>
<th>Grade Point Value</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</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(less than satisfactory)</td>
<td>0</td>
</tr>
<tr>
<td>CR</td>
<td>Credit (at least equivalent to a “C” grade. Units awarded are not counted in determining the student’s grade point average.)</td>
<td>3</td>
</tr>
<tr>
<td>NC</td>
<td>No-Credit (Equivalent to a “D” or “F” grade. No units awarded, and units are not counted in determining grade point average. No-Credit grades will be considered in probation and dismissal procedures.)</td>
<td>0</td>
</tr>
</tbody>
</table>

**CREDITS AND GRADES**

**Definition of a Unit of Credit**

The standard “unit” represents one hour in class recitation and two hours of outside preparation per week or its equivalent for one semester. By this definition, “unit” is synonymous with “semester lecture hours.” In laboratory work and certain activity courses such as physical education, choir, drafting, etc., a greater number of in-class hours per week is required for each unit of credit. In summer sessions, one unit of credit represents three hours of lecture per week.

**Classification of Students**

Students at Mt. San Antonio College are classified as follows:

- **Full-time** — enrolled in 12 or more units in a fall or spring semester, or four or more units during a six-week summer or winter session.

- **Part-time** — enrolled in less than 12 units during the fall or spring semester or less than 4 units during a six-week session or less than nine units during a nine-week summer or winter session.

- **Freshman** — a student who has completed less than 30 units of credit.

- **Sophomore** — a student who has completed 30 units of credit or more.

**Grading System**

Scholastic grades showing the academic achievement of students are issued at the end of each semester. Any student enrolled as of the first day of the fourth week in a full semester course for any semester shall receive one of the marks listed below on his/her permanent record.

**Incomplete**

A student may file a petition for an incomplete or the instructor may initiate the petition on behalf of the student who is currently passing the class under the following circumstances: verifiable illness or emergency or verifiable work conflict. Incompletes may only be issued for requirements missed within the fourteenth (14) week of a regular semester class or after 85% of a short-term or summer session or winter intersession class. Re-enrollment in the same course for purposes of making up the incomplete is prohibited. The petition is subject to the approval of the instructor. If the petition is granted, the student must complete all outstanding course requirements (stipulated on the Petition to Request Incomplete form) within one year, or the incomplete will be come a letter grade assigned by the instructor.

**RD — Report Delayed:** The “RD” symbol may be assigned only by the Admissions and Records Office. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. “RD” shall not be used in calculating grade point averages.

**W — Withdrawal:** Withdrawal from a class or classes shall be authorized through the last day of the 10th week of instruction of a regular semester-length class. A notation (“W” or other) shall be made on the academic record of the student who withdraws during the first three weeks of a regular semester-length class. Withdrawal between the first day of the 4th week and the last day of the 10th week of instruction shall be recorded as a “W” on the student’s record. A “W” shall not be used in calculating grade point averages, but excessive “W’s” shall be used as factors in probation and dismissal procedures. Withdrawal from short term classes of less than semester length, but greater than six weeks, is authorized for a period of time through 61% of the course, and a mark of “W” shall be made on the student’s academic record. Students are allowed no more than two “W” grades in a class. After earning two “W” grades in a class, to repeat a class, the student must petition using the process described under “Limitations on Repeating Courses.” No notation shall be made on the academic record of a student who withdraws from a short term class of less than semester length, but greater than six weeks, provided the student withdraws no later than the end of the first 30% of the course.

**MW — Military Withdrawal:** The “MW,” military withdrawal mark shall be assigned only for students who are members of an active or reserve military unit, and who receive orders compelling a withdrawal from courses. Upon verification of such order, this symbol may be assigned at any time after the period established by the governing board during which no notation is made for withdrawals. The “MW” shall not be counted in determining registration priority, progress probation, and dismissal calculations. In order to retain catalog rights, a student must re-apply for admission within one semester of completion of active duty.” A “W” previously incurred commencing January 1, 1990, and which meets the definition of “MW” may be changed to “MW.”

**Final Examinations**

A final examination shall be administered in all classes in compliance with the Final Exam Schedule prepared each semester by the Admissions and Records Office. If a student is unable to attend a scheduled final examination, he/she must contact his/her instructor to make other arrangements. A student who does not take a final examination and who does not qualify for an “Incomplete” (see Grading-Incomplete), shall be assigned the grade “F” or “Zero” for the examination, and this grade shall be averaged in determining the final course grade. When a grade of “Incomplete” has been given, a copy of the final examination must be filed in the appropriate division office at the close of the semester.

**Early Examinations**

If a student must leave school prior to the scheduled final examinations week, he/she may take early examinations with the approval of his/her instructor. In no case may a student be released earlier than two weeks before the scheduled date of his/her final examination.

**Credit/No Credit Grades**

Some courses offered at Mt. San Antonio College are available to students on two different grading options: letter grade (A, B, C, D, F) or Credit/No Credit (CR = A, B, or C; NC = D, F). A few classes are offered for Credit/No Credit only. These courses are designed to encourage students to explore areas outside their major field of study in order to broaden and enrich their collegiate experience, and to afford an opportunity for departments to offer courses in which there is diminished emphasis on grades.

- The Credit/No Credit grading option is no longer available for General Education courses.

In courses offering the grading option, students are automatically registered on a letter grade basis at the time of registration. If a change is desired, the student must declare his/her intention to be graded on a Credit/No Credit basis at the Admissions and Records Office no later than the last day of the fourth week of instruction in a full semester class. The grading option may not be changed at a later date. Students enrolled in short-term courses of less than semester length, but greater than six weeks, must determine their grading option no later than the end of the first 30% of the course or 30% of the required hours of instruction listed in the description for an open-
Credit by Examination

The general philosophy of Mt. San Antonio College is that the interaction which takes place between the student and professor is of critical importance to the learning process. However, quality instruction places a premium on meeting individual student needs. Therefore, Mt. San Antonio College provides for Credit by Examination enabling the student to accelerate his/her educational program by providing opportunity to obtain credit in those fields in which he/she has already achieved proficiency independently or by informal means.

Pursuant to Section 55753 of Title 5 of the California Administrative Code, students at Mt. San Antonio College may apply for Credit by Examination and such unit credit may be granted subject to the following rules and regulations:

**Rules and Regulations**

1. Credit by Examination will be granted only for those courses which have been so designated by the departments.
2. Any grade received for Credit by Examination will be entered on the student's permanent record with a notation of "Credit by Comprehensive Exam."
3. A student may petition for Credit by Examination provided:
   a. The student has been registered at Mt. San Antonio College.
   b. The student has not already received credit nor is currently enrolled beyond six weeks in the same course or in a more advanced course (except for Advanced Placement Course Credit).
   c. The student has at least a 2.0 grade point average. This includes transfer/new students.
4. The student may obtain the petition for Credit by Examination from the Division Office.
5. The department will establish written guidelines by which the eligibility of a student to take such an examination is determined.
6. The Department will assign a grade depending on the results of the examination and submit the form "Petition for Credit by Examination" to Admissions and Records.
7. The student may not use Credit by Examination to satisfy the residency requirement for the degree.

A list of courses for Credit by Examination is available at each Division Office, the Instruction Office, or through Counseling and Advising Services.

**Advanced Placement Examinations in CSU General Education — Breadth Certification**

Advanced Placement examinations may be incorporated into certification of completion of CSU General Education—Breadth requirements by any participating institution. Students must have scored 3, 4, or 5 on an Advanced Placement examination listed below to receive the credit indicated. All CSU campuses will accept the minimum units shown below toward fulfillment of the designated General Education—Breadth area if the examination is included in a full or subject-area certification; individual CSU campuses may choose to accept more units than those specified below towards completion of General Education—Breadth requirements. The CSU campus to which the student is transferring determines the total number of units awarded for successful completion of an Advanced Placement examination and the applicability of the examination to other graduation requirements. See the table above for specific AP Subjects.

**International Baccalaureate Credit**

Students completing all or portions of the International Baccalaureate (IB) program at their high school may petition to utilize the results of their IB examinations to meet Mt SAC general education requirements in the areas identified below. Only IB certificate examinations with scores of 5, 6 or 7 on will be honored.
Academic Policies and Requirements

INTERNATIONAL BACCALAUREATE CREDIT FOR GENERAL EDUCATION REQUIREMENTS FOR THE ASSOCIATE DEGREE

<table>
<thead>
<tr>
<th>IB Examination</th>
<th>Number of Units Awarded to Mt. SAC General Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>5 semester units toward Area B2</td>
</tr>
<tr>
<td>Business Management</td>
<td>NA</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5 semester units toward Area B1</td>
</tr>
<tr>
<td>Classical Languages</td>
<td>5 semester units toward Area C2</td>
</tr>
<tr>
<td>Computer Science</td>
<td>NA</td>
</tr>
<tr>
<td>Dance</td>
<td>5 semester units toward Area C1</td>
</tr>
<tr>
<td>Design Technology</td>
<td>NA</td>
</tr>
<tr>
<td>Economics</td>
<td>5 semester units toward Area A2</td>
</tr>
<tr>
<td>Film</td>
<td>5 semester units toward Area C2</td>
</tr>
<tr>
<td>Geography</td>
<td>5 semester units toward Area D2</td>
</tr>
<tr>
<td>History</td>
<td>5 semester units toward Area C2 or D2</td>
</tr>
<tr>
<td>History of Islamic World</td>
<td>5 semester units toward Area C2 or D2</td>
</tr>
<tr>
<td>Language A1</td>
<td>5 semester units toward Area A1</td>
</tr>
<tr>
<td>Language A2/B</td>
<td>5 semester units toward Area C2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>5 semester units toward Math Proficiency</td>
</tr>
<tr>
<td>Music</td>
<td>5 semester units toward Area C1</td>
</tr>
<tr>
<td>Philosophy</td>
<td>5 semester units toward Area C2</td>
</tr>
<tr>
<td>Social and Cultural Anthropology</td>
<td>5 semester units toward Area D2</td>
</tr>
<tr>
<td>Theatre Arts</td>
<td>5 semester units toward Area C1</td>
</tr>
<tr>
<td>Visual Arts</td>
<td>5 semester units toward Area C1</td>
</tr>
</tbody>
</table>

Students who have both a qualifying Advanced Placement (AP) test score (3 or above) and a qualifying IB certificate exam score (5 or above) in the same examination area, or who have completed a college level course for credit, will only have the first completion counted for credit. Both UC and CSU stipulate that IB students who complete an IB diploma are eligible to receive 30 units of credit toward graduation. These are unspecified units (electives) and do not meet specific general education requirements at the university. Mt. SAC will not honor such requests by diploma students. Only individual IB exams will be eligible to receive academic credit.

Credit for Extra Institutional Learning

Philosophical Basis
This policy of granting credit for extra-institutional learning is provided for students under special conditions in recognition of learning that has been attained outside the sponsorship of legally authorized and accredited post-secondary institutions.

General Policy Statement
Credit for extra-institutional learning will be awarded to those students who have attained competency of subject matter through experiences outside of the sponsorship of legally authorized and accredited post-secondary institutions.

The College will accept the recommendations of the American Council on Education in reference to the guide to the Evaluation of Educational Experience Experiences in the Armed Forces and the National Guide to Credit Recommendation for Non-collegiate courses; the College Entrance Examination board in reference to its recommendation of Advanced Placement Examinations, and credit recommendations from other similar nationally recognized academic institutions, including Mt. San Antonio College’s policy for comprehensive examinations.

Policy Regulations
- Of the 60 units required for the Associate Degree, at least twenty-four (24) units must be earned in courses that contribute to the grade point average.
- Extra-institutional learning credit will normally not be evaluated unless the credit is necessary for graduation.
- Credit for non-collegiate courses will be awarded only for work applicable toward the Associate Degree. Credit may be granted for upper division courses provided the student has earned less than 60 units at the time the upper division work is attempted.

To petition for extra-institutional learning credit, a student must have at least a 2.0 grade point average, not be on probation, and be in good standing.

The permanent academic record shall be annotated in such a manner to ensure that a true and complete history of extra-institutional learning credit has been granted.

In cases where a student is seeking a degree/certificate from the College, all standard graduation and residency requirements apply and must be met by completing a minimum of 12 units earned from Mt. SAC courses.

Credit for Military Training
Mt. San Antonio College will grant four units of Baccalaureate level elective credits for military experience without regard to the field of service. Additional credit may be allowed for specific programs of training and credits earned through the United States Armed Forces Institute. The College will follow the recommendations made by the American Council on Education.

HONORS

Academic Honors

President’s List
The President’s List is an honors list comprised of those students who have achieved a 3.50 or better grade point average in a minimum of twelve (12) letter-graded Associate Degree applicable units per semester.

Dean’s List
The Dean’s List is an honors list comprised of those students who have achieved a 3.0 to 3.49 grade point average in a minimum of twelve (12) letter-graded Associate Degree applicable units per semester.

Graduation Honors
Graduation honors are awarded as follows:

Academic Distinction
The “Academic Distinction Honor” designation is placed on the transcript and degree of the graduate who has achieved an overall grade point average (GPA) of 4.00.

Scholastic Honor
The “Scholastic Honor” designation is placed on the transcript of the graduate who has achieved an overall grade point average (GPA) of 3.90 through 3.99.

With Honors
The “With Honors” designation is placed on the transcripts and degree of the graduate who has achieved an overall grade point average (GPA) of 3.75 through 3.89.

Honors Program
Mt. San Antonio College offers an Honors Program for students who
have demonstrated academic excellence. Honors courses are specially designed sections of transferable general education courses and, with a few exceptions, are part of the IGETC requirement list.

Completion of the Honors Program makes a student eligible for guaranteed priority admission to the following universities: UCLA, UC Irvine, UC Riverside, UC Santa Cruz, Chapman University, Pepperdine University, Pitzer College, Pomona College, and Occidental College. In addition to an enhanced curriculum for motivated students, Honors Program students receive library privileges at UC Irvine, UCL, and UC Riverside; and an Honors Certificate and pin upon honors certification.

Entrance Requirements
- High School Students — Eligibility for ENGL 1A; 1,000 composite SAT2 score; 3.5 GPA
- Mt. San Antonio College Students — Nine transferable units; Eligibility for ENGL 1A; 3.5 GPA (Waivers can be obtained through the Honors Program Office for highly motivated students with a competitive GPA and an in-progress grade report and professor recommendation.)

Requirements for “Honors Scholar” Designation
- Complete six (6) honors courses (18 units) with a minimum 3.2 GPA for honors certification
- Maintain a 3.2 GPA

For additional information about Mt. SAC's Honors Program, contact the Vice President of Instruction at Ext. 5414 or the Honors Program Office at Ext. 4665.

Alpha Gamma Sigma
Mt. San Antonio College sponsors the Zeta Chapter of Alpha Gamma Sigma, the statewide scholastic honorary organization for California Community Colleges. There are three categories of membership eligibility. Only degree appropriate courses/units (those that grant credit for an Associate or Bachelor’s degree) may be used to establish eligibility for membership (Exception: Temporary Membership).

1. Temporary: (First college semester only) Must hold a California Scholastic Federation (CSF) Life Membership OR be a high school graduate with a cumulative grade point average of 3.5 or higher. This membership is intended as an introduction to Alpha Gamma Sigma and is not to be considered as an initial membership.

2. Initial: (First time membership) Must have completed 12 degree-appropriate units in a maximum of three (3) semesters with a degree appropriate cumulative grade point average of 3.0 or higher.

3. Continuing: (Previous membership) Must have achieved for the previous semester a degree appropriate grade point average of 3.0 or higher OR have maintained a degree appropriate cumulative grade point average of 3.0 or higher.

Part-time students are eligible for membership. Membership requires campus and community involvement (service hours).

Applications are available in Student Life, Building 9C-1. For further information and review of academic eligibility, students should consult an Alpha Gamma Sigma Officer or an Alpha Gamma Sigma Advisor. Scholarships provided by Zeta Chapter and the State Alpha Gamma Sigma Organization are available to actively involved members. Some baccalaureate granting institutions provide scholarship assistance which is limited to Alpha Gamma Sigma members. For details, consult with an Alpha Gamma Sigma Advisor.

Permanent membership in Alpha Gamma Sigma is an honorary lifetime AGS title for students who have completed 60 degree appropriate units; a minimum of 30 of the total 60 units must have been completed at Mt. SAC. A permanent membership application must be submitted by the graduation petition deadline. To apply students must: a) have a cumulative GPA of 3.25 or higher for 60 completed degree appropriate units and, b) complete a minimum of two semesters as an active or inactive member. Only permanent members receive recognition at graduation.

Phi Theta Kappa
Mt. SAC sponsors the Alpha Omega Alpha Chapter of Phi Theta Kappa, an international scholastic honorary organization for America’s two-year colleges, including Canada, Germany, Puerto Rico, Panama and American Samoa. Eligibility for membership is established for the following:

1. Full and part-time students who have completed 12 appropriate degree units with a 3.5 grade point average at an accredited institution.

2. Students who have maintained a 3.5 grade point average while a member.

For further information and review of academic eligibility, students should consult a Counselor or a Phi Theta Kappa advisor. Currently, some 70 U.S. colleges and universities offer scholarships to members. There are several advantages which accompany this honor, including recognition at graduation. Applications are available at the Honors Program office in 26A-102.

ACADEMIC STANDARDS

Probation and Dismissal
There are two forms of probation: Academic Probation and Progress Probation.

Academic Probation
A student is placed on Academic Probation when the student has:
1. Attempted at least 12 units, and
2. Earned a cumulative grade point average below 2.00.

Progress Probation
A student is placed on Progress Probation when the student has:
1. Enrolled in a total of at least 12 units, and
2. The cumulative percentage of all units in which the student has enrolled for which entries of “W,” “I,” and “NP” are recorded reaches or exceeds fifty percent.

Upon recording of Academic or Progress Probation a student shall have their registration restricted, be required to participate in a prescribed counseling intervention and be limited to enroll in a maximum of 12 units in subsequent semesters, and 4 units in a winter or spring term, while on probation.

Clearing Probation
1. Academic Probation - The student shall be cleared from Academic Probation when the student’s cumulative grade point average is 2.0 or higher.
2. Progress Probation - The student shall be cleared from Progress Probation when the student’s cumulative percentage of units with “W,” “I,” and “NP” drops below fifty percent.

Probation and Dismissal Status
1. First Semester Probation
   a. Academic - occurs at the end of that first semester in which the student has attempted at least 12 units and has earned a cumulative grade point average below 2.0, or
   b. Progress - the cumulative percentage of all units in which the student has enrolled for which entries of “W,” “I,” and “NP” are recorded reaches or exceeds fifty percent.
2. Second semester Probation
   a. Academic - occurs when the student in their consecutive semester continues to have a cumulative grade point average below 2.0, or
   b. Progress - continues to have a cumulative percentage of all units enrolled recorded as “W,” “I,” and “NP” at fifty percent or higher.

3. Dismissal occurs after three consecutive semesters of Academic or Progress Probation. The student shall be dismissed for at least one semester. If the student has enrolled in the subsequent semester before the Dismissal status has been determined through the posting of the previous semester’s grades, the student may be dropped from all classes.

For the purposes of this section, semesters shall be considered consecutive on the basis of the student’s enrollment, as long as the break in the student’s enrollment does not equal two primary terms or more.
Academic Policies and Requirements

Appeal of Dismissal
A student who is subject to dismissal may request an appeal of dismissal through the Counseling Department. If approved, the student shall be required to participate in a prescribed counseling intervention and complete a contract. Failure to comply with the terms and conditions of the contract may result in subsequent dismissal.

Reinstatement after Dismissal
A dismissed student may request reinstatement through the Counseling Center after an interval of one semester. A reinstated student shall remain on probationary status until clearance of probation. Failure to comply with the terms and conditions of the contract may result in subsequent dismissal.

RECORDS

Definition of Educational Records
Educational records consist of those files maintained by the following offices: Admissions and Records, Counseling, Assessment, Financial Aid, and those files maintained for individual students by departments.

Academic Renewal
The Academic Renewal Policy is provided for students in specific circumstances where previously recorded, substandard academic performance is not reflective of the student's present demonstrated ability. Academic renewal applies only to substandard coursework completed at Mt. SAC. Students with substandard coursework at other colleges/universities need to contact those institutions to see if they are eligible for academic renewal under the provisions of academic renewal of said institution.

A. A maximum of twenty-four units may be alleviated.
B. Since completion of the work to be disregarded, the student's cumulative grade point average for all units completed at the time of adjustment must be at least 3.0 for 18 semester units, 2.5 for 24 semester units, or 2.0 for 30 units. The cumulative grade point average may include course work completed at Mt. San Antonio College and/or other accredited colleges or universities. Courses used to qualify for Academic Renewal which were completed at another college or university must be verified by official college transcripts.
C. A time period of at least two years must have elapsed since the end of the term of substandard work to be disregarded.
D. Academic renewal will apply only to substandard grades: D, F, and NC.
E. The permanent academic record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history.
F. Mt. San Antonio College does not guarantee that academic renewal will be honored by institutions outside of the District. This determination will be made by the transfer institution.
G. Students requesting academic renewal must file a petition in the Admissions and Records Office. Students should consult with a counselor prior to filing this petition.

Transcripts
Official transcripts of work completed at Mt. San Antonio College may be obtained by submitting a written request to Admissions and Records located on the lower level of the Student Services Center. The first two requests for transcripts are free, subsequent requests are $2.00 each. Free unofficial/student copies of transcripts may be obtained from campus kiosks or from the Advising Center located on the upper level of the Student Services Center or online at http://my.mtsac.edu.

Challenge of Educational Records
1. Any student may file a written request with the Records Officer of the District (Dean, Enrollment Management) to remove information recorded in the student's records which is alleged to be: 1) inaccurate; 2) an unsubstantiated personal conclusion or inference; 3) a conclusion or inference outside of the observer's area of competence; or 4) not based on the personal observation of the named person with the time and place of the observation noted.
2. If the student is not satisfied with the determination made by the Dean, Enrollment Management, the student may utilize the existing college student grievance process (p. 239).
Section 4
Student Services and Student Life
Student Services and Student Life

STUDENT SERVICES

Mt. San Antonio College provides a wide range of support services which are essential for success to assist a diverse student population in achieving their educational, career, personal and social goals.

Admissions and Records
Student Services Center, Ext. 4415

Admissions and Records, located on the lower level of the Student Services Center, provides a variety of services to students. It is usually the first office prospective students visit, and the last office students visit before transferring or graduating. The following are some of the services provided:

1. All students must submit an application for admission in order to attend Mt. San Antonio College. The admissions application generates a Permit to Register and establishes a historical student record for each student. Also, transcripts from high school and other colleges must be submitted for prerequisite eligibility checks.

2. All registration is done online via the web at my.mtsac.edu or by telephone at (909) 595-MSAC. Registration instructions can be found in the latest Schedule of Classes or online at my.mtsac.edu.

3. Other services provided by Admissions and Records include maintaining student demographic information such as name, address and Mt. SAC student identification numbers; maintaining student academic history, issuing I-20’s for International Students, processing Petitions for Exceptional Action, processing transcript and enrollment verification requests, processing graduation and certificate petitions and distributing diplomas and certificates. Admissions and Records is the official custodian of student records and maintains all permanent and grade books received from faculty.

4. The Admissions and Records Office also provides the Student Services Kiosks located in the Student Services Building. These kiosks provide unofficial transcripts, final grades, and copies of the Permit to Register. All services available at the kiosk are also available at my.mtsac.edu. To use this service, students must have their Mt. SAC Student Identification number and Personal Identification Number (PIN).

Assessment Center
Student Services Center, Ext. 4265

The Assessment Center administers the College’s placement and career assessment program. Services offered are as follows:

1. Placement testing (English, Math, and Reading) measures students’ readiness for appropriate course placement.

2. Career Assessments measure student interests, abilities, work values, and experience to help students with career planning.

To make an appointment for testing or for further information, call or visit the Assessment Center, located on the lower level of the Student Services Center.

The Bridge Program, Ext. 5392

The Bridge program is a learning community designed to increase students’ academic and personal success through the structuring of a personalized learning environment.

Admission to the program is based on academic need. Students participating in Bridge are enrolled in linked classes that are taught in a cooperative environment between instructors. In this group setting, students have an opportunity to learn about being successful college students and how to utilize college services. In addition, students are supported by Bridge Program staff and counselors, financial aid advisors, as well as by transfer and advising specialists.

The Bridge Program is the right choice for students who find themselves undecided on career choices, who have apprehensions about the transition to college, and who would like to make new friends.

Bridge students share particular educational goals, common interests, and similar backgrounds.

As part of the Bridge Program, students can choose to be part of the Summer Bridge, English Bridge, Math Bridge, and/or the Pre-Nursing/Health Bridge.

Bursar’s Office and Photo ID, Ext. 4960

The Bursar’s Office, located in Building 9A, is responsible for the collection of credit registration fees and other campus fees including parking permits, transcripts, enrollment verification and production cards. The office also processes photo ID cards and refunds for credit classes.

Career Placement Services
Student Services Center, Ext. 4510

Career Placement Services helps students and graduates to continue to attend college or to enter into a career field related to their A.S. Degree or career certificate.

Services include:

- Job referrals to employment opportunities in the community
- Internship opportunities
- Assistance with resumes and interviewing skills
- Employment acquisition skills workshops
- Job search library and printed handouts
- Job fairs and on-campus recruiting
- Internet access to recruiting sites and job boards on the web

While Mt SAC graduates may return to the Career Placement Office for employment assistance, current students are strongly encouraged to visit Career Placement Services while they are still attending.

Counseling and Advising Services Center
Student Services Center, Ext. 4380

Students can take advantage of educational planning, career exploration and decision-making, and other services offered through Counseling and Advising Services.

Counselors are available to assist students who:

- are undecided about their major or career direction;
- need information about their career and transfer options;
- are having difficulty in their courses;
- need assistance with personal problems.

It is highly recommended that students see a counselor during their first semester at Mt. SAC to develop a student educational plan.

Counselors and educational advisors can also provide:

- information on degree completion;
- information about major and transfer requirements to CSU, UC and private universities;
- general information about the college.

An appointment can be scheduled by calling (909) 594-5611, ext. 4380.

Disabled Student Programs & Services (DSP&S), Student Services Center, Ext. 4290

If students have a disability which limits their ability to participate fully and equally in any College instructional program and/or activity, they are encouraged to visit Disabled Student Programs and Services. A professional will meet with them to determine the extent of their limitations and the special services and accommodations that may be provided for their needs.

To take advantage of the wide array of special programs and services we offer, written documentation of disability must be provided by a physician or appropriate professional; the disability must present a limitation to a successful education; the ability to benefit from instruction must be demonstrated; and self-management skills (mobility, eating and using restrooms without assistance) must be adequate, unless an attendant is utilized. We do not provide attendant service.

If students have a doctor’s verification that requires them to park in zones designated as “handicapped parking,” they are required to apply for a state “Disabled Person” permit and placard from the Department of Motor Vehicles, if they don’t already have one.

If students have a current “Disabled Person” permit and placard or a “DP” license plate from the State of California Department of Motor Vehicles, they are not required to purchase a student parking permit. They are allowed to park in any parking space designated as “handicapped parking,” any metered space (at no cost), or any time-

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limited space (without having to observe the time limit specified). Students must ensure that the placard or license plate is displayed properly. DSPRS highly recommends that students visit our department to determine if there are any other services that may provide assistance while they attend Mt. San Antonio College.

Programs and services are provided for students with various disabilities. There are eligibility requirements for some of the programs offered. We invite and encourage all students to visit Disabled Student Programs and Services, located on the lower level of the Student Services Center.

CARE (Cooperative Agencies Resources for Education), Ext. 4392
(See Extended Opportunity Programs and Services – EOPS)

Extended Opportunity Programs and Services (EOPS), Student Services Center, Ext. 4500

Extended Opportunity Programs and Services (EOPS), located on the lower level of the Student Services Center, provides access to higher education for students with academic and financial disadvantages and the office of EOPS assists students seeking Re-Entry services as well as those who qualify for CARE. Some of the services offered are:

- Counseling
- Educational Planning
- Peer Advising
- Instructional Development and Services
- Tutoring
- Book Service Program
- Financial Assistance

To be eligible for the EOPS program, a student must:
- Be a California resident
- Be enrolled as a full-time student (12 units or more)
- Have fewer than 70 degree applicable units
- Qualify to receive a Board of Governors Enrollment Fee Waiver under Method A or B
- Be educationally disadvantaged

CARE (Cooperative Agencies Resources for Education) is a support program for EOPS students who are single head of household parents receiving CalWORKS — and provides additional assistance to students who are:

- Eligible for EOPS
- Enrolled in at least 12 units upon acceptance
- Currently receiving AFDC/TANF assistance, with at least one child under 14 years of age
- At least 18 years old, single head of household
- Have applied for financial aid and have a need for child care, transportation, books and supplies, and/or counseling to attend college
- Pursuing a program at Mt. SAC which will lead to a certificate, degree or transfer
- Students who believe they qualify for the program should visit the EOPS Office.

Financial Aid
Student Services Center, Ext. 4450

Financial aid is intended to help students who might not otherwise be able to attend college. Although the primary responsibility for meeting college costs rests with the student and his or her family, it is recognized that many families have limited resources and are unable to meet the cost of a college education. Financial aid programs have been established to provide assistance for students with documented financial need.

The College provides financial assistance in the form of grants, loans, scholarships, and part-time employment for students who meet financial aid program eligibility requirements. Student financial aid awards are contingent upon continued funding from Federal and State government agencies. Students eligible for financial aid typically receive a “package” of aid from two or more of the financial aid programs.

All students may be eligible for some form of assistance based on their financial need. The Financial Aid Office, located on the upper level of the Student Services Center building, administers aid programs for eligible applicants. Eligibility criteria for financial aid programs are subject to frequent change. Students may apply for aid by filing a Free Application for Federal Student Aid (FAFSA) form. A FAFSA worksheet is available in the Financial Aid Office for students interested in filing online at www.fafsa.ed.gov. For any questions or further information, contact the Financial Aid Office, ext. 4450.

The information reported on the FAFSA may be verified by the Financial Aid Office using a parent’s and/or student’s Internal Revenue Services Forms 1040, 1040A or 1040EZ. Other documents may also be requested such as a copy of the Social Security card, Alien Registration card (if applicable) and a Photo ID for identification purposes.

Recipients of aid from Federal and State funded programs must be students enrolled in eligible programs of study for the purpose of obtaining a degree, an approved Title IV certificate, or transfer. In addition to financial need, other eligibility requirements for most Federal and State programs include:

1. Having a high school diploma, a GED, or passing the Ability to Benefit test. For more information on ability to benefit, contact the Financial Aid Office.
2. Being a U.S. Citizen or eligible non-citizen.
3. Maintaining satisfactory progress in accordance with the standards.
4. Not be in default on a federal loan or grant overpayment.
5. Be registered with the selective service, if required.
6. Have a valid social security number.

To be considered for financial aid, students must complete the Free Application for Federal Student Aid (FAFSA) or the renewal application. These applications are usually available beginning in January for the following academic year. If a student is interested in a State of California Grant, the FAFSA and a GPA verification form must be completed. The Cal Grant program deadline is March 2nd of each year. For students who miss this deadline, there is a second opportunity only for community college students to apply for Cal Grants. The deadline for this is September 2nd. Additional information and eligibility requirements are available at the Financial Aid Office.

The FAFSA is the application for the following Federal and State programs:

- Federal Perkins Loans
- Board of Governors Fee Waiver
- Federal Pell Grant
- Federal Academic Competitiveness Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Work-Study Program (FWS)
- Need-based scholarships
- Federal Direct Loans (subsidized and unsubsidized)
- State CAL Grants
- Chafee Grant (for Foster youth)
- Federal Family Education Loan (FFEL)

Students who receive federal financial aid and do not attend any classes will be required to repay all of the funds they have received. Students who withdraw from all classes prior to completing more than 60% of the semester are subject to the Return of Title IV funds requirements and will have their financial aid eligibility recalculated based on the percentage of the semester completed, and will be required to repay any unearned financial aid they have received. At Mt. SAC a student’s withdrawal date is determined as follows:

1. the date the student officially notified the Admissions Office of his or her intent to withdraw;
2. the midpoint of the semester for a student who leaves without notifying the college;
3. the student’s last date of attendance at a documented academically-related activity;
4. the date posted by the instructor indicating last day of attendance.
The California Community College Board of Governors Fee Waiver program is available to qualified California residents. The enrollment fee is waived for eligible students. The student is responsible for paying the remainder of the fees assessed within seven business days of registration. There are three methods to qualify for a Board of Governors Fee Waiver: (1) Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI), or General Relief recipient, or (2) Household size/family income, or (3) Financial need as determined by filing the Free Application for Federal Student Aid (FAFSA). Applications for this program are available in the Financial Aid office. In addition to the three methods, there are special classifications that qualify for an enrollment fee waiver, which is subject to certification and/or documentation. Refer to the BOG Fee Waiver application for a list of these classifications.

In addition, the college administers a variety of scholarship programs. Information about the College Scholarship Program can be obtained in the Financial Aid Office.

**Student Health Services**
Building 67B, Ext. 4400
Medical, chiropractic, personal counseling, nursing and health education services are provided. Additional services include laboratory tests, tuberculosis screening, limited prescription medication, immunizations, pregnancy testing and referrals. All credit students who are currently enrolled and attending classes are eligible. Part-time faculty are eligible for select services. Some fees may apply. Professional health services are provided primarily on an appointment basis. Same-day appointments are also available; call between 8:00 and 8:30 a.m. First aid services are provided for all student, employees and guests of the College.

**International Student Programs**
Mt. San Antonio College annually welcomes hundreds of international students on F-1 visas to pursue a higher education. International students must complete and submit additional application materials and pay non-resident fees to study at the College. Specialized counseling assistance is available. Staff in Admissions and Records are also available to assist international students.

**First Year Experience, Ext. 5392**
The First Year Experience program offers a unique combination of courses this fall to incoming students who aren’t quite prepared for college-level math and English. First Year Experience students will receive:
- Instant enrollment in pre-college math and English classes. (Guaranteed enrollment granted on a first-come, first served basis.)
- Chance to earn up to 9 units of academic credit.
- Popular morning sessions.
- Expert counseling on what it takes to succeed in college and beyond.

In addition, the coursework is enriched with field trips and tutorial assistance to enhance the learning experience.

**Re-Entry Services**
Student Services Center, Ext. 4392
(See Extended Opportunity Programs and Services – EOPS)

**Veterans’ Services**
Student Services Center, Ext. 4520
Veterans’ Services, located on the upper level of the Student Services Center, provides programs for Veterans and dependents seeking educational and/or vocational training under Title 38, United States Code.

Veterans are urged to take advantage of the counseling service and educational programs offered by Mt. San Antonio College. The College cooperates with the Veterans’ Administration and with the California State Bureau of Vocational Rehabilitation in helping veterans. Veterans and dependents are required to comply with Veteran Regulations Section 21.4135, 21.4235, and 21.4277, in regard to required attendance and progress that the student (veteran or dependent) must meet in order to receive educational benefits under Title 38, United States Code.

The Veterans’ Administration requires all entering veterans to be formally evaluated for military experience to prevent future interruption of educational benefits. All prior transcripts (College or Service) must be received and evaluated by our Admissions and Records Office as soon as possible along with a complete and signed educational plan prior to the second semester. Students should visit the Counseling Center for assistance in completing their educational plan.

Satisfactory progress of veterans or eligible dependents is measured by the successful completion of the number of units enrolled. “W,” “NC,” and “F” grades are considered punitive grades. “P” grades may cause an overpayment if the veteran does not take his/her final. Please refer to Mt. San Antonio College’s Probation and Dismissal Policies in this Catalog.

A 2.0 GPA must be maintained in order to receive an Associate Degree. Should a veteran fail to make satisfactory progress for two semesters, benefits will be terminated. The veteran will be contacted and an appointment must be made with a counselor. Upon satisfactory completion of one semester of approved courses, benefits will be reinstated.

The veteran or dependent has the responsibility to adhere to these standards of attendance and progress and to notify the Veterans’ Services Office of any change in status that would affect the collecting of veteran’s benefits. Additions, drops, withdrawals, and last day of attendance must be reported at once.

The College maintains a Veterans Service Center to assist veterans and/or dependents in all matters pertaining to veteran’s benefits. Veterans and/or eligible dependents must apply each semester for their Veterans Administration educational assistance allowance through the Veterans’ Service Center. Special details such as application deadlines can be found in the most current Schedule of Classes.

**Child Development Center**
Building 9E, Ext. 4920

**Admission Policy**
Early care and education services for children from birth through 5 are provided between the hours of 6:30 a.m. and 7:00 p.m., Monday through Thursday and 6:30 a.m. until 5 p.m. on Fridays for student/parent, staff, and community parents (community children on a space available basis only). The Child Development Center welcomes all children regardless of sex, ethnicity, religion, or physical handicap. A child must be in good health and parents must meet eligibility requirements. A student/parent must be enrolled in 6 or more units of credit coursework in order to be accepted into the program. Day time students have priority.

**State Preschool Program Half and Full Day**
A State Preschool Program is available for eligible student/parent of 3- and 4-year-old children (4-year-old children have priority). There may be a minimum daily fee for this program.

**General Childcare Funding**
This program is available on a limited basis for eligible student/parents. There may be a minimum daily fee for this program depending on the family's gross monthly income.

**Child Care Access Grant Funding**
Parents who receive or are eligible for a Pell grant may qualify for this program funding.
Fee Program
Children not qualified or accepted into any center funded program may
enroll in the fee-based program. The fee schedule is available by
contacting the Child Development Center.

Enrollment
Formal application must be made in person at the Child Development
Center, Building 9E, located North of the campus bookstore (SacBookRac).
Final acceptance into the program will be determined when eligibility has
been decided, all paperwork has been completed, and all required fees are
paid. State Law requires that an oral interview/orientation be completed.

For information concerning registration dates and times, those
interested should consult the latest Mt. San Antonio College Schedule of
Classes or contact the Child Development Center at Ext. 4920.

Security Escort Service, Ext. 4233
Mt. San Antonio College offers a security escort service from 6:30 p.m.
to 10:10 p.m. Monday through Thursday. Students can request an escort
by calling Ext. 4233. Please refer to the Escort map below to identify
the locations. Escorts can be identified by their yellow jackets and
ID badges. Escorts are employed under the jurisdiction of the Public
Safety Department.

Escort Location Map
Campus escort locations are indicated on the map below with a white X.

STUDENT LIFE
Student Life provides opportunities for participation in leadership
programs, student government, student clubs, and other social, personal
growth and development experiences.

Student Life Office/Student Center
Building 9C, Ext. 4525
The Student Life Office is responsible for student involvement and
leadership programs, and serves as the hub of student activities at
Mt. SAC. Information regarding the LEAD (Leadership Education and
Development) Program, student leadership conferences, volunteer
opportunities and other involvement opportunities that are available in
Student Life. This office also handles lost and found items, approves and
enforces all on-campus posting, and assists in contacting students in
emergency situations.

Students who are involved in co-curricular activities are encouraged
to complete the Activities Transcript (available online), which comple-
ments their academic transcript and verifies the student’s involvement
in service and leadership activities outside of the classroom.

The Director of Student Life serves to counsel and discipline
students based upon the College’s Student Discipline Policy. Students are
assisted in understanding their due process rights and grievance
procedures. The office responds to disciplinary issues and advises faculty
and staff on issues related to discipline. Students who have complaints
regarding their final grades or their experiences on campus can receive
assistance in the Student Life Office.

The Associated Students (AS) Government offices are located here
as well as club mailboxes.

Student Life Center
Building 9C, Ext. 5959
The Student Life Center provides a relaxing area to lounge, watch TV,
play foosball, ping pong or a variety of board games. Students also have
access to free wireless internet with their laptop. The Student Center
creates a supportive and relaxing environment for students to socialize
and connect with other students as well as serves as a meeting place
for events, activities, clubs and student government. The Student Center
is also the place to find information about off-campus housing.

Associated Students (AS) Student Government
Building 9C, Ext. 4525
Student Government serves as the representative voice for students on
all College issues and provides students with an opportunity to develop
leadership skills. There are six executive officer positions and twenty
Senate positions available to students interested in becoming involved in
making a positive difference on campus. The Senate allocates monies
to support various College programs, events and services. There are
opportunities for students to also serve on College-wide committees
to influence College policies and decision making. Associated Students
meetings are held every Tuesday in the Student Center, Building 9C,
Room 5 from 3:00 p.m. - 5:00 p.m. The Student Activities Fee funds
many AS sponsored events and initiatives which support student clubs,
programs, projects and services throughout the year. The Bursar’s Office
(Bldg. 9A) sells AS discount amusement park and movie tickets.

Campus Clubs and Organizations
Building 9C, Ext. 4525
There are many opportunities for students to join a variety of over
45 student clubs: cultural, social, academic, religious and recreational.
Students can also start a new club through the Student Life Office. The
Inter-Club Council (ICC) is comprised of one representative from each
student club. ICC meets weekly on Mondays from 1:00 p.m. - 2:00 p.m.
to discuss club activities and formulate procedures to better serve the
campus community. Join-A-Club is a three-day event that takes place at
the beginning of each semester to inform students about student club
involvement opportunities. A current listing of all student clubs and
organizations is available in the Student Life Office.
Section 5
Instruction and Learning Resources
INSTRUCTION

Distance Learning Program

What is Distance Learning?
Distance Learning is a mode of education in which a portion of the instruction occurs when there is a geographical distance between the teacher and the student. Students do not need to come to the campus each week but can learn from, and communicate with, their professor using a variety of technologies.

Online Learning Classes:
Mt. San Antonio College offers many classes online via the Internet. To be successful in these courses, students must have access to a personal computer with Internet connection using Netscape Navigator 6 or Internet Explorer 6 and an e-mail address.

Online-Supported (Hybrid) Classes:
Hybrid classes have one or more components of the class delivered in an online mode via the Internet. Students meet with their instructor and attend on-campus meetings. (Number of on-campus meetings to be determined by the instructor).

For further information about the Distance Learning Program at Mt. San Antonio College, contact the Dean, Library & Learning Resources at (909) 594-5611, Ext. 5658.

Study Abroad Program

Mt. San Antonio College offers students a wide range of study abroad opportunities. The Work and Study in London Program leads participants to obtain a mini-certificate in International Business while working for up to six months in the United Kingdom. There are also a number of short-term summer study programs sponsored by the college in international locations, and our membership in the California Colleges for International Education (CICE) permits students to participate in study abroad programs sponsored by dozens of other member community colleges throughout California. Interested students may inquire about these programs by contacting the Humanities and Social Sciences Division Office, Ext. 4570, or by visiting the International Studies Office in Building 26A, Room 120.

Work Experience Education

Occupational work experience education is supervised work activity extending classroom-based occupational learning at an on-the-job learning station (work site) relating to the student’s occupational goal. This is guided by a written agreement between the College, the work site, and the student, providing the learner with adequate equipment, materials, and facilities to support the learning objectives specified within the agreement.

Student Qualifications

Students participating in Work Experience must:
1. Have the approval of the assigned work-experience Instructor/Coordinator.
2. Have an occupational or educational goal to which, in the opinion of the Instructor/Coordinator, the work-experience chosen will contribute.
3. Pursue a planned program of work-experience education based on written, measurable learning objectives which are directly related to the student’s educational program and which, in the opinion of the Instructor/Coordinator, include new or expanded responsibilities or learning opportunities beyond those experienced during previous employment. Repetition of experiences in an ongoing job does not permit continued eligibility for the program.
4. Meet the following condition if self-employed: Identify a person who is approved by the Instructor/Coordinator to serve as a designated employer representative. This representative shall agree, in writing, to accept the following employer responsibilities:
   a. Assist the student in identifying new or expanded on-the-job learning objectives.
   b. Assist in the evaluation of the student’s identified on-the-job learning objectives.
   c. Validate hours worked.

Credits

For the satisfactory completion of work-experience education, the College will grant credit to a student in an amount not to exceed four (4) units per semester, with a maximum total of sixteen (16) units during the student’s enrollment at the College. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester of supervised work is required for each unit of credit.

The students must be, as verified by the supervising instructor, enrolled in an occupational program directly related to the work experience assignment.

The student enrolled in the work-experience program shall assume and comply with the following responsibilities:
1. Unless otherwise determined, develop measurable learning objectives approved by the Instructor/Coordinator and work-site supervisor.
2. If under the age of 18, obtain the written permission of their parents.
3. Faithfully discharge the duties of the on-the-job assignment.
4. Notify the Instructor/Coordinator of any work-site problems or change in status of duties.
5. Try at all times to represent themselves and the College positively while at the work site.

6. If, prior to enrolling in work-experience education, the student is already employed full time by the work site where the work experience will take place, the student must write a report concerning a learning objective that extended beyond the duties of the regular job.

The Writing Center, Building 26B, Rooms 100, 130, 131

The Writing Center offers free services to all students. The Center provides one-on-one tutoring in writing for any course at the College; CRLA certified tutors and at least one English instructor are present at all times. In addition, the Writing Center offers a variety of workshops to help students with common writing issues, such as sentence level errors, thesis statements, essay planning and organization, and beginning college research. The Center also houses a computer lab that is available for student use to work on papers, conduct library and internet research, and develop their grammar and writing skills using self-directed educational software. Professional software is on all the computers to allow students to create presentations, and printing (regular and color), scanning and technical assistance is also available.

Math Activities Resource Center (MARC), Building 40, Room 113

The Math Activities Resource Center provides academic assistance for students enrolled in developmental (precollege) courses in the Math Department. Drop-in tutoring by trained tutorial staff and credentialed math instructors is free to all students enrolled in math courses from basic algebra to intermediate algebra. Also available are:
- A group study room
- Computerized tutorial resources and software
- Video lectures on CD-ROM, VHS and DVD
- Math textbooks and solutions manuals
- Free review worksheets on many topics
- A variety of calculators for daily check-out or semester rental (with completion of an application/rental agreement)

For more details on services and hours, please inquire at the MARC (ext. 5014) or by e-mail at marclab@mtsac.edu.

LIBRARY AND LEARNING RESOURCES

Learning Assistance Center, Building 6, South Entrance, Lower Level, Learning Technology Center

The Learning Assistance Center offers instruction for students who need to review pre-collegiate skills in math, reading, and writing. The center additionally offers free student services including tutoring, assessment of skills, and support in developing a personalized study plan.

Tutorial Services in the Learning Assistance Center provides free
Instruction and Learning Resources

tutoring to all Mt. San Antonio College students, both drop-in and study group tutoring. Regularly scheduled tutors assist students with their course work in most subject areas and with their study skills techniques.

The Learning Lab computers and audio-visual equipment are available to all students in the community. The computers enable students to use the Internet for research, to communicate with instructors through e-mail, to view multimedia programs, to use word processing, to develop multimedia research projects, and to supplement classroom activities through computer-assisted instruction.

Library, Building 6, North Entrance, Upper Level, Learning Technology Center

The Library offers students, faculty, and staff a wide variety of information resources for their research needs. In addition to traditional resources such as books, journals, newspapers, videos, career guides, and college catalogs, researchers may also search numerous full-text article databases and access lists of pre-evaluated Internet web sites. Reserves allows faculty to provide continuous access to course materials free of charge to students.

Professional librarians are available days and evenings to teach library research techniques to entire classes by appointment and to individuals at the reference and information desk. The librarians at the library information desk are particularly helpful in assisting with all aspects of the research process from choosing a topic to searching for and evaluating information in print and electronic formats.

Media Services, Building 6, North Entrance, Upper Level, Learning Technology Center

Media Services has over three thousand DVDs and videos available for student viewing. Students must view the videos in the Media Services center.

COMPUTER AIDED GRAPHICS, VISUAL ARTS AND DESIGN PROGRAMS

Mt. San Antonio College offers many computer courses, majors, and certificates. Each of these has a special emphasis. The brief descriptions that follow are intended to help students select the correct computer specialization for their interests. Students planning to transfer to four-year institutions should consult the catalog of the school to which they plan to transfer for specific lower division requirements.

ARCHITECTURE & ENGINEERING DESIGN TECHNOLOGY DEPARTMENT

Architectural Technology - A.S. Degree & Certificates

Prime Focus: This is both a professional and vocational program that offers the full range of design and technical aspects of architecture, preparing students for employment, skill upgrade or transfer to universities. The program utilizes conventional and current computer graphics/design applications.

Job Market: Career opportunities include Architect, Architectural Designer, Drafter, CADD Operator, Model Builder, and Illustrator. (See Sections 7 and 8)

Engineering Design Technology - A.S. Degrees & Certificates

Prime Focus: This course of study prepares students for Computer-Aided Design and Drafting careers in technical fields, including Engineering Drafting and Design Technologies in Electro Mechanical, Civil, and Mechanical Design. An A.S. Degree is offered in Engineering Design Technology and 3 level certificates.

Job Market: The curriculum is designed to prepare students in computer-aided drafting and design (CADD) for careers in technical fields such as: Mechanical Design, Engineering, Engineering Technology, Manufacturing, Civil Design, and Aerospace. (See Sections 7 and 8)

COMMERCIAL AND ENTERTAINMENT ARTS DEPARTMENT

Advertising Design & Illustration - A.S. Degree

Prime Focus: Builds upon the traditional core art courses to provide students with basic skills and concepts utilized in the visual communication industries.

Job Market: Advertising design skills are employed any time an image or graphic design needs to be generated for commercial usage.

Aesthetics for Technology Certificate

Prime Focus: Provides fundamental design skills and concepts related to art and technology-related industries.

Job Market: Skills acquired in this program may be utilized in a variety of visual communication industries including Art, Advertising, and Multimedia.

Animation—(Traditional, 2-D, and 3-D Digital Animation) - A.S. Degree & Certificates

Prime Focus: An integrated program of Traditional and Digital Animation providing skills for the entertainment arts.

Job Market: Supplies skills for a variety of entertainment arts careers including Traditional and Digital Animation, Motion Graphics, Gaming, Special Effects, and Web Animation.

Web Page Design Certificate

Prime Focus: To provide students with a course of study that includes the use of technology and design issues in a comprehensive way.

Job Market: Web design skills are used any time an organization, business, or individual utilizes the internet for marketing or advertising or as a promotional tool.

Computer Graphic Design/Photography - A.S. Degree & Certificate

Prime Focus: Offers the full range of introductory to advanced courses in computer graphic design and photography. This program focuses on the application of the principles of visual communication design, and provides technical training in computer generated image production, manipulation, formatting and layout. The focus is on development, refinement and enhancement of visual design and technical skills.

Job Market: Free-Lance or Corporate Graphic Design; Marketing Photography; Advertising Design; Photojournalism; Commercial or Industrial Photography; Broadcast, Entertainment or Software Graphic Design. (See Sections 7 and 8)

Photography - A.S. Degree & Certificates

Prime Focus: Offers the full range of introductory to advanced courses. As both an art and technical craft, photography offers a dynamic set of creative challenges to both the person behind the camera and a wide range of technical specialist in related disciplines. The program focuses on development, refinement and enhancement of visual imaging.

Job Market: Freelance or Corporate Photographer, Studio or Location Photographer, Art/Gallery Photographer or Archivist, Photographic Developing/Printing Technician, Digital Photo Assistant, and Digital Editing Technician (See Sections 7 and 8)
COMPUTER PROGRAMMING, COMPUTER SECURITY, AND COMPUTER SERVICING

Mt. SAC offers many courses, certificates, and majors in the areas of computer programming, security, and servicing. Each of these has a special emphasis. The brief descriptions that follow are intended to help students select the correct computer specialization for their interests. Students planning to transfer should consult the catalog of the school to which they plan to transfer for specific lower division requirements.

Departments offering programs in computer programming, security, and servicing are:
- Computer Information Systems Department
- Electronics and Computer Technology Department
- Mathematics, Computer Science Department

COMPUTER INFORMATION SYSTEMS DEPARTMENT

**Prime Focus:** The curriculum of the CIS program covers such areas as basic computer literacy, microcomputer applications, the Internet, telecommunications, software development, computer networks, and operating systems. Software development incorporates creating graphical interfaces, client/server applications, object-oriented programming techniques, and web-based applications.

Course offerings include introduction to information systems, microcomputer applications which include the Microsoft Office suite of applications, beginning and advanced relational database design in Access and Oracles, systems analysis and design, telecommunications and networking, Windows and Linux operating systems, information systems security, client/server side web programming and software development courses in: Visual Basic, Java, C++, and C#.

Mt. SAC's Regional Information Systems Security Center (RISSC) has developed new computer security courses to assist students with job-related and personal computer security demands. Courses most directly focused in this regard are CISS 11 – Practical Computer Security, CISS 13 – Principles of Information Systems Security, and CISS 15 – Operating Systems Security, along with RISSC’s networking security courses.

Auxiliary Services, Building 9D, Ext. 4470
The Auxiliary Services/Accounting Office serves students, faculty, staff, and the campus community. The following services are provided by this office:
- administration and supervision of the fiscal operations of the Associated Students
- accounting for Mt. SAC Relays, the Cross Country Invitational Meet and the AAF Youth Days
- accounting for campus clubs and trusts
- administration of the Athletic Services Fund
- accounting for the bookstore, Dining Services, and Performing Arts
- administration of contracts
- ticket sales for student events
- limited cashing of personal checks with campus ID
- ordering and distributing faculty caps and gowns
- billing for catering from Dining Services
- payroll/Human Resources for all areas of the enterprise
- processing of purchase orders and checks for all areas of the enterprise
- preparing daily change funds for all areas of the enterprise
- processing vending machine refunds
- selling Foothill and Metro bus passes

Bookstore “SacBookRac,” Building 9A, Ext. 4475
The bookstore, “SacBookRac,” is located in Building 9A on the north end of the campus.
Students are encouraged to buy books early, especially if they are interested in purchasing used books (first-come/first-served). In addition to basic textbooks, general trade and paperback books, sundries, greeting cards, soft goods, and gifts are also available.

Refund Policy
Students must purchase their own textbooks and supplies. Expenses for books and supplies for full-time students average about $300-$350 per semester, depending upon the program of study selected.
Refunds are allowed within a certain limited time period when classes are changed and officially dropped. The refund policy is posted and available in the bookstore and printed on a bookmark given at the time of purchase.

Exercise Science/Wellness Center, Building 27A, North Door, Ext. 4625
This modern, multi-dimensional facility offers health and lifestyle screening; health, fitness, and performance physical fitness assessments; all levels of aerobic exercise (including step aerobics); circuit/strength training; and cardiorespiratory exercise.

Programs and services include: stress management, nutrition, diet/weight control, EKG/metabolic testing, athletic performance testing, individual health/fitness programming and injury prevention/rehabilitation. Activities are offered for all age groups including a youth fitness program and courses for older adults.
The Center is open for a fee to Mt. San Antonio College students, staff, and surrounding community. The Center also provides corporate employee wellness programs on campus and at business work sites. For further information, contact the Exercise/Wellness Center at Ext. 4625.

Campus Café Building 8, Ext. 4105
The Campus Café, located on the west side of campus next to the SacBookRac, features homemade, fresh café-style dining. Catering is available for small meetings up to large banquets.

Common Grounds Building 8, Ext. 4180
Common Grounds, located inside the Campus Café, features Starbucks coffees, wireless Internet access, and Wednesday evening poetry readings.

Mountie Grill Building 19C, Ext. 4624
The Mountie Grill, located on the southern portion of the campus, is a fast food restaurant providing a variety of food items.

Convenience Stores
All stores offer a variety of snack foods, cold and hot beverages, and school and test supplies.

Mountie Stop Building 9A, Ext. 4497
Express Stop Building 16A, Ext. 4142
Quick Stop Building 40, Ext. 6216
Short Stop Building 66

Vending Machines Buildings: 4, 7, 9C, 26, 28, 30, 40, 45

Performing Arts Center
The Mt. San Antonio College Performing Arts Center is a 66,770 square foot facility that provides instructional and performance accommodations to the three main discipline areas of Theatre, Music, and Dance. The Performing Arts Center was designed as a technological, state-of-the-art instructional facility to prepare Mt. San Antonio College students for careers in the performing arts.
The Sophia B. Clarke Theater is a formal 415-seat, full proscenium theater that wraps the audience around a performance. By providing a circular form and box seats at the perimeter, audience intimacy with the stage is maximized. The stage and fly tower are at a professional scale and contain equipment equal to the finest state-of-the-art theaters both regionally and internationally.
The Music Recital Hall provides for intimate musical performances. The Recital Hall is a 250-seat acoustical space richly articulated with reflective surfaces of maple wood and acoustical plaster; it is acoustically shaped with a 43’ high ceiling. Sound reflectors above the stage further support acoustical distribution.

The Studio Theater adjacent to the Clarke Theater is surrounded by a scene shop, costume shop, dressing rooms, and faculty offices. The 40’ x 50’ x 40’ theater allows for total dramatic performance flexibility. An 18’ lighting grid allows light and scene flexibility. The Studio Theater is such a flexible facility that it can accommodate most any seating and scene configuration.

The Dance Studio is a 56’ x 85’ x 30’ high mirrored room that allows for a grand level of physical movement. With its ceiling and upper walls painted white and bathed in natural lighting, it is an appealing and brilliant space.

Each of the three venues was designed to provide state-of-the-art acoustical quality and technical performance capabilities that put the Mt. SAC Performing Arts Center on a level with the finest theaters in the region.

Performing Arts Center Box Office
Box Office Phone: (909) 468-4050
Box Office Fax: (909) 468-4031
The Mt. San Antonio College Performing Arts Center Box Office is located in the Performing Arts Center Complex (off Grand Avenue) adjacent to the Sophia B. Clarke Theater. The Box Office is open Monday - Friday from 12:00 p.m. to 5:00 p.m. and two hours prior to a scheduled performance. The current season’s brochure of events is available through the Box Office.

Ticket orders are accepted over the telephone, through the mail, in person, or by fax. Mastercard, Visa, Discover, and American Express are accepted. All phone-in and mail-in orders are subject to a $3.00 service charge.

Tickets may be exchanged for another performance of the same production up to 24 hours before the performance. If patrons are unable to attend a performance, tickets may be returned and the college will issue a receipt for a tax-deductible donation. All tickets are non-refundable.

Planetarium, Ext. 2050
The planetarium offers instructional support for college classes, as well as a wide variety of public programs on a regular basis. Information on planetarium shows is available through a 24-hour hotline.

Radio Station and Cable TV Station, Ext. 4678
KSAK, 90.1 FM, is the campus radio station broadcasting to the community. The Community College Instructional Network (CCIN), a distance learning network offering twenty-six credit courses via televised lessons to forty-two community colleges, originates from the Mt. San Antonio College Broadcast Studio.

Wildlife Sanctuary, Ext. 4425
This ten-acre parcel, located on the southwestern portion of the Mt. San Antonio College campus includes a stream, lake, pond, swamp, meadow, and woodland. The sanctuary has been set aside as a place where plants and animals exist in a natural balance. Paths through the sanctuary provide access for visitors. For guided tours, contact the College’s Campus Events office at Ext. 4794.
Section 7
Programs of Study Leading to a Certificate
Programs of Study Leading to a Certificate

Mt. San Antonio College offers two different types of certificates for credit programs of study:

- "Certificates of Achievement" are awarded for completion of an approved program of study meeting certain requirements of the California Community College Chancellor Office in terms of total unit values and other criteria. The possession of such a certificate is favored by business and industry and is frequently a requirement for professional advancement. Included in the Certificates of Achievement are a wide variety of occupational certificates as well as two certificates designed to reflect completion of general education requirements for students preparing to transfer to a California State University campus (CSU General Education Breadth) or to a campus of the University of California or CSU Intersegmental General Education Transfer Curriculum (IGETC). The awarding of all Certificates of Achievement is noted on a student's official transcript.

- "Skills Certificates" are lower-unit certificates in various occupational areas. Although the awarding of Skills Certificates is not noted on a student's official transcript, the student may apply for and receive a documentation certificate from the college that may be of value in documenting knowledge and skills to potential employers. In many cases, entry-level Skills Certificates may be part of a ladder-track of increasing levels of preparation in an occupational area, and courses used to complete them may form a core of requirements that are augmented as students pursue higher levels of proficiency toward a Certificate of Achievement.

Note: The unit requirement for Skills Certificates is below that required for some forms of financial aid eligibility. Students should consult with the Financial Aid Office to determine whether a particular program of study qualifies for financial aid.

Requirements for all certificates include the following:

- At least 1/2 of the credits earned toward the certificate must be completed at Mt. San Antonio College.
- A grade of "C" or better must be earned in each course to be applied to the certificate.
- For certificates in CSU General Education Breadth and IGETC only, students must submit an Application for Certificate form in the Admissions Office during the last semester of the certificate program.

Note: Completion of a Certificate of Achievement for a CSU General Education Breadth or IGETC is not the same as CSU or IGETC Certification for transfer. For more information on certification, see pages 102-110 of this catalog.

Mt. San Antonio College also awards Certificates of Competency for certain non-credit programs of study. Information on these certificates may be found on pages 224-232.

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<td>Parametric Solid Modeling</td>
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<td>Welding</td>
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</table>
LEADING TO A CERTIFICATE

Additional lower-division general education courses at a University of California campus, but this pattern is intended for students who follow IGETC are planning to transfer to their specific transfer university. For requirements, see page 108 of this catalog (the reference page is the CSU General Education pattern requirements page in the "Transfer" section 9.)

Note: this certificate signifies completion of the CSU general education requirements ONLY; transfer students must generally also satisfy lower-division requirements in a specific major in order to be able to transfer with junior-level status. It is highly recommended that all students intending to transfer consult with Counseling and Advising Services, and that they refer to the current catalog of their specific transfer university.

For requirements, see page 104 of this catalog (the reference page is the CSU General Education pattern requirements page in the "Transfer" section 9.)

Intersegmental General Education Transfer Curriculum (IGETC)
Completion of coursework for this certificate is intended for students who are planning to transfer to a public 4-year university within California. Most students who follow IGETC are planning to transfer to a University of California campus, but this pattern is also accepted by the California State University system. Completion of courses for this certificate will permit students to transfer without the need to take additional lower-division general education courses to satisfy university general education requirements.

Note: this certificate signifies completion of the IGETC general education requirements ONLY; transfer students must generally also satisfy lower-division requirements in a specific major in order to be able to transfer with junior-level status. Not all UC campuses or all majors will accept the specific major in order to be able to transfer with junior-level status. It is highly recommended that all students intending to transfer consult with Counseling and Advising Services, and that they refer to the current catalog of their specific transfer university.

For requirements, see page 108 of this catalog (the reference page is the IGETC requirements page in the "Transfer" section 9.)

Certificates of Achievement

CSU General Education Breadth
Completion of coursework for this certificate is intended for students who are planning to transfer to one of the campuses of the California State University system. In most instances, completion of courses for this certificate will assist students in transferring without the need to take additional lower-division general education courses to satisfy university general education requirements.

Requirements for the Certificate
Required courses:
Completion of the Accounting - Financial Planning Certificate (21 Units) or Accounting: Managerial Certificate (19 Units) as follows:

**Accounting and Management Department Certificate 60502**
The Accounting Certificate incorporates various accounting courses that prepare the student for entry-level positions and/or professional advancement in a wide variety of accounting jobs. These jobs include general accounting, cost accounting, payroll, inventory management, asset management, credit and collections, financial analysis, etc.

**Requirements for the Certificate**
Required courses:
Completion of the Accounting - Bookkeeping Certificate (9-10 Units) as follows:

**Accounting - Managerial Accounting Certificate 60533**
The Accounting - Managerial Accounting Certificate provides basic accounting skills and knowledge concentrating in the areas of budgeting, tax, and financial planning. This certificate prepares the student for an entry-level position as a computerized accounting clerk. Common duties performed in this field include cost analysis, budget preparation, variance analysis, expense reporting, account analysis and preparation of various internal reports to help management make decisions.

**Requirements for the Certificate**
Required courses:

**Accounting - Computerized Accounting and Management Department Certificate 60503**
The Accounting - Computerized Certificate provides the student with basic accounting skills and knowledge together with additional training in computer applications common to the accounting industry. This certificate program prepares the student for an entry-level position as a computerized accounting clerk. Common duties performed in this field are utilization of accounting software programs for posting transactions to journals/ledgers, accounts receivable, accounts payable, inventory tracking/reporting, bank reconciliation, expense reporting, and account analysis.

**Requirements for the Certificate**
Required courses:
Completion of the Accounting - Bookkeeping Certificate (9-10 Units) as follows:

**Accounting - Financial Planning Certificate 60509**
The Accounting - Financial Planning Certificate provides the student with basic accounting skills combined with specialized training in financial planning. Students completing this certificate can assist companies within the areas of budgeting, tax, and financial planning.

**Requirements for the Certificate**
Required courses:
Administrative Assistant - Level II
Office Technology Department
Certificate 60514

The Level II Certificate prepares students for clerical positions where office organization and transcription skills are needed.

Requirements for the Certificate

Required courses:
Completion of the Administrative Assistant - Level I course work (14 units) as follows:

- BUSO 25 Business Communications 3.0
- COMP 2 Intermediate Computer Keyboarding 4.0
- COMP 20 Word for the Business Professional 4.0
- COMP 68 Transcription Techniques 3.0

Plus the following courses:

- Level II as follows:
  - BUSO 25 Business Communications 3.0
  - COMP 2 Intermediate Computer Keyboarding 4.0
  - COMP 20 Word for the Business Professional 4.0
  - COMP 68 Transcription Techniques 3.0
- Total Units 28.0

Air Conditioning and Refrigeration

Air Conditioning, Water & Refrigeration Technologies
Certificate 60909

This program is designed to prepare the student for employment in the broad field of air conditioning, heating, and refrigeration. It leads to occupations in design, manufacturing, operation, sales, distribution, installation, maintenance, and repair. Students desiring a Bachelor's Degree (transfer program) should consult with an advisor to discuss transferability of courses.

Requirements for the Certificate

Required courses:

- Day program courses AIRM 65A and 66B are equivalent to evening program courses AIRM 95A, 95B, 96A, 96B, 97A, 97B, 98A, and 98B, and 99B.
- Successful completion of this program enables students to take the FAA examination in General and Powerplant. Passing the General Exam plus the Airframe and/or Powerplant Exam provides certification as an Aircraft Maintenance Technician which is required for employment in this field. Students desiring a Bachelor's Degree (transfer program) should consult with an advisor to discuss transferability of courses.

Aircraft Powerplant Maintenance Technology - Day

Aircraft Maintenance Tech & Manufacturing Dept.
Certificate 60912

This program prepares students to enter employment as a certified powerplant technician in the aircraft maintenance industry. Training is given in the overhaul of various powerplants and their components. Completion of this program leads to an Associate in Science Degree or a Certificate. Excellent opportunities for employment exist in this area of training. Certain administrative, quality control, and flight personnel careers require the applicant to hold a valid A & P Certificate.

This program offers a day (full-time) or evening (part-time) program option. The only difference between the two options is the course numbering and time required to complete the program. Day program courses AIRM 65A and 65B are equivalent to evening program courses AIRM 95A, 95B, 96A, 96B, 97A, 97B, 98A, and 98B. Day program courses AIRM 66A and 66B are equivalent to evening program courses AIRM 95A, 95B, 96A, 96B, 97A, 97B, 98A, and 98B.

Aircraft Powerplant Maintenance Technology - Evening

Aircraft Maintenance Tech & Manufacturing Dept.
Certificate 60952

This program prepares students to enter employment as a certified powerplant technician in the aircraft maintenance industry. Training is given in the overhaul of various powerplants and their components. Completion of this program leads to an Associate in Science Degree or a Certificate. Excellent opportunities for employment exist in this area of training. Certain administrative, quality control, and flight personnel careers require the applicant to hold a valid A & P Certificate.

This program offers a day (full-time) or evening (part-time) program option. The only difference between the two options is the course numbering and time required to complete the program. Day program courses AIRM 65A and 65B are equivalent to evening program courses AIRM 95A, 95B, 96A, 96B, 97A, 97B, 98A, and 98B. Day program courses AIRM 66A and 66B are equivalent to evening program courses AIRM 95A, 95B, 96A, 96B, 97A, 97B, 98A, and 98B.
Programs of Study Leading to a Certificate

Successful completion of this program enables students to take the FAA examination in General and Powerplant. Passing the General Exam plus the Airframe and/or Powerplant Exam provides certification as an Aircraft Maintenance Technician which is required for employment in this field. Students desiring a Bachelor's Degree (transfer program) should consult with an advisor to discuss transferability of courses.

Requirements for the Certificate

Required courses:

AIRM 70A  Aircraft Maintenance Electricity 3.0
AIRM 70B  Aircraft Maintenance Electricity 3.0
AIRM 71  Aviation Maintenance Science 6.0
AIRM 72  Aviation Materials and Processes 1.5
AIRM 73  Aviation Welding 1.5
AIRM 90A  Aircraft Powerplant Maintenance Technology 3.0
AIRM 90B  Aircraft Powerplant Maintenance Technology 3.0
AIRM 92A  Airframe Maintenance Technology 3.0
AIRM 92B  Airframe Maintenance Technology 3.0
AIRM 93A  Airframe Maintenance Technology 3.0
AIRM 93B  Airframe Maintenance Technology 3.0
AIRM 94A  Aircraft Powerplant Maintenance Technology 3.0
AIRM 94B  Aircraft Powerplant Maintenance Technology 3.0
AIRM 95A  Aircraft Powerplant Maintenance Technology 3.0
AIRM 95B  Aircraft Powerplant Maintenance Technology 3.0
AIRM 96A  Aircraft Powerplant Maintenance Technology 3.0
AIRM 96B  Aircraft Powerplant Maintenance Technology 3.0
AIRM 97A  Aircraft Powerplant Maintenance Technology 3.0
AIRM 97B  Aircraft Powerplant Maintenance Technology 3.0
AIRM 98A  Aircraft Powerplant Maintenance Technology 3.0
AIRM 98B  Aircraft Powerplant Maintenance Technology 3.0
EDT 12  Technical Engineering Drawing II 3.0
ELEC 90  Survey of Electronics 3.0
MFG 70  Technical Mathematics - Manufacturing Applications 3.0
PHYS 1  Physics 4.0

Total Units 39.0

Recommended Electives:

AIRM 74  Aircraft Maintenance Technology - Work Experience 3.0
AIRM 80  Lab Studies in Aircraft Maintenance Technology 1.5
AIRM 81  Lab Studies in Aircraft Maintenance Technology 1.5
AD 1  Alcohol/Drug Dependency 3.0
AD 2  Physiological Effects of Alcohol/Drugs 3.0
AD 3  Chemical Dependency 3.0
AD 4  Issues in Domestic Violence 3.0
AD 5  Political Science 1.5
AD 6  Business Law 3.0
AD 7  Group Process and Leadership 3.0
AD 8  Family Counseling 3.0
AD 9  Criminal Justice 3.0
AD 10  Client Record and Documentation 1.5
AD 11  Techniques of Intervention and Referral 3.0

Airframe Maintenance Technology - Day
Aircraft Maintenance Tech & Manufacturing Dept. Certificate 60911

This program prepares students to enter employment as a certified airframe technician in the aircraft maintenance industry. Training is given in the overhaul of various airframes and their components. Completion of this program leads to an Associate in Science Degree or a Certificate. Excellent opportunities for employment exist in this area of training. Certain administrative, quality control, and flight personnel careers require the applicant to hold a valid A & P Certificate.

This program offers a day (full-time) or evening (part-time) program option. The only difference between the two options is the course numbering and time required to complete the program. Day program courses AIRM 66A and 66B and 66C are equivalent to evening program courses AIRM 90A, 90B, 91A, 91B, 92A, 92B, 93A, and 93B.

Successful completion of this program enables students to take the FAA examinations in Airframe and General. Passing the General Exam plus the Airframe and/or Powerplant Exam provides certification as an Aircraft Maintenance Technician which is required for employment in this field. Students desiring a Bachelor's Degree (transfer program) should consult with an advisor to discuss transferability of courses.

Requirements for the Certificate

Required courses:

AIRM 66A  Airframe Maintenance Technology 12.0
AIRM 66B  Airframe Maintenance Technology 12.0
AIRM 70A  Aircraft Maintenance Electricity 3.0
AIRM 70B  Aircraft Maintenance Electricity 3.0
AIRM 71  Aviation Maintenance Science 6.0
AIRM 72  Aviation Materials and Processes 1.5
AIRM 73  Aviation Welding 1.5
Total Units 39.0

Recommended Electives:

AIRM 74  Aircraft Maintenance Technology - Work Experience 3.0
AIRM 80  Lab Studies in Aircraft Maintenance Technology 1.5
AIRM 81  Lab Studies in Aircraft Maintenance Technology 1.5
AIRM 90A  Airframe Maintenance Technology 3.0
AIRM 90B  Airframe Maintenance Technology 3.0
AIRM 91A  Airframe Maintenance Technology 3.0
EDT 12  Technical Engineering Drawing II 3.0
ELEC 90  Survey of Electronics 3.0
MFG 70  Technical Mathematics - Manufacturing Applications 3.0
PHYS 1  Physics 4.0

Airframe Maintenance Technology - Evening
Aircraft Maintenance Tech & Manufacturing Dept. Certificate 60951

This program prepares students to enter employment as a certified airframe technician in the aircraft maintenance industry. Training is given in the overhaul of various airframes and their components. Completion of this program leads to an Associate in Science Degree or a Certificate. Excellent opportunities for employment exist in this area of training. Certain administrative, quality control, and flight personnel careers require the applicant to hold a valid A & P Certificate.

This program offers a day (full-time) or evening (part-time) program option. The only difference between the two options is the course numbering and time required to complete the program. Day program courses AIRM 66A and 66B and 66C are equivalent to evening program courses AIRM 90A, 90B, 91A, 91B, 92A, 92B, 93A, and 93B.

Successful completion of this program enables students to take the FAA examinations in Airframe and General. Passing the General Exam plus the Airframe and/or Powerplant Exam provides certification as an Aircraft Maintenance Technician which is required for employment in this field. Students desiring a Bachelor's Degree (transfer program) should consult with an advisor to discuss transferability of courses.

Requirements for the Certificate

Required courses:

AIRM 70A  Aircraft Maintenance Electricity 3.0
AIRM 70B  Aircraft Maintenance Electricity 3.0
AIRM 71  Aviation Maintenance Science 6.0
AIRM 72  Aviation Materials and Processes 1.5
AIRM 73  Aviation Welding 1.5
Total Units 39.0

Recommended Electives:

AIRM 74  Aircraft Maintenance Technology - Work Experience 3.0
AIRM 80  Lab Studies in Aircraft Maintenance Technology 1.5
AIRM 81  Lab Studies in Aircraft Maintenance Technology 1.5
AIRM 90A  Airframe Maintenance Technology 3.0
AIRM 90B  Airframe Maintenance Technology 3.0
AIRM 91A  Airframe Maintenance Technology 3.0
AD 1  Alcohol/Drug Dependency 3.0
AD 2  Physiological Effects of Alcohol/Drugs 3.0
AD 3  Chemical Dependency 3.0
AD 4  Issues in Domestic Violence 3.0
AD 5  Political Science 1.5
AD 6  Business Law 3.0
AD 7  Group Process and Leadership 3.0
AD 8  Family Counseling 3.0
AD 9  Criminal Justice 3.0
AD 10  Client Record and Documentation 1.5
AD 11  Techniques of Intervention and Referral 3.0

Alcohol/Drug Counseling
Public Services Department
Certificate 62101

Upon completion of the required courses with a grade of "C" or better, a Certificate in Alcohol/Drug Studies will be awarded by the Technology and Health Division.

Requirements for the Certificate

Required courses:

AD 1  Alcohol/Drug Dependency 3.0
AD 2  Physiological Effects of Alcohol/Drugs 3.0
AD 3  Chemical Dependency 3.0
AD 4  Issues in Domestic Violence 3.0
AD 5  Political Science 1.5
AD 6  Business Law 3.0
AD 7  Group Process and Leadership 3.0
AD 8  Family Counseling 3.0
AD 9  Criminal Justice 3.0
AD 10  Client Record and Documentation 1.5
AD 11  Techniques of Intervention and Referral 3.0
May be exposed to infectious and contagious disease, requires decisions/actions related to end of life issues.

Regularly exposed to the risk of blood borne diseases.

Subject to many interruptions.

Subject to burns and cuts.

Exposed to hazardous agents, body fluids and wastes.

Contact with patients having different religious, cultural, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances.

Handle emergency or crisis situations.

Subject to many interruptions.

Requires decisions/actions related to end of life issues.

Exposed to products containing latex.

English Language Skills:

Although proficiency in English is not a criteria for admission into the nursing program, students are encouraged to be able to speak, write and read English to complete classes successfully and to ensure safety for themselves and others.

<table>
<thead>
<tr>
<th>Programs of Study Leading to a Certificate</th>
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<tbody>
<tr>
<td><strong>Animation - Digital 2-Dimensional</strong></td>
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<tr>
<td>Commercial and Entertainment Arts</td>
</tr>
<tr>
<td>Certificate 61011</td>
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<tr>
<td>The Digital 2-D Certificate provides training for creative careers that integrate animation with video, audio, graphics and special effects for Websites, broadcast, film, presentation or mobile content. The Animation Program offers an integrated/interdisciplinary approach to prepare students to meet current and future job market demands. The student will be given a balanced blend of art and technology-based skills which are essential for today's careers in animation. The program offers an A.S. Degree and three Certificates. Course content is driven by industry needs in order to provide the student with the best possible preparation for a career in animation.</td>
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<tr>
<td>Requirements for the Certificate</td>
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<tr>
<td>Required courses:</td>
</tr>
<tr>
<td>ANIM 101 Drawing - Gesture and Figure 3.0 CSU</td>
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<tr>
<td>ANIM 104 Drawing Fundamentals 3.0 CSU</td>
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<tr>
<td>ANIM 108 Principles of Animation 3.0 CSU</td>
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<tr>
<td>ANIM 117 Storyboarding 3.0</td>
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<tr>
<td>ANIM 116 Character Development 1.5</td>
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<tr>
<td>ANIM 119 Portfolio 1.5</td>
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<tr>
<td>ARCT 66 Portfolio 3.0</td>
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<tr>
<td>ANIM 120 Script Development for Animation 3.0</td>
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<tr>
<td>ANIM 172 Motion Graphics With After Effects 3.0</td>
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<tr>
<td>ANIM 175 Web Animation With Flash 3.0</td>
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<tr>
<td>ARCT 70 Computer Graphics: Introduction 3.0 CSU</td>
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<tr>
<td>ARCT 74 Computer Graphics: Web Design 3.0 CSU</td>
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<tr>
<td>ARTD 17A Drawing: Life 3.0 CSU,UC</td>
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<tr>
<td>Total Units 33.0 - 34.5</td>
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</tbody>
</table>

| Recommended Electives:                    |
| ANIM 107 Figure in Motion                 |
| ANIM 109 Advanced Principles of Animation |
| ANIM 130 Introduction to 3-D Computer Animation |
| ANIM 134A Work Experience in New Digital Media |
| ANIM 137B Work Experience in New Digital Media |
| ARCT 66 Portfolio                          |
| ANIM 137C Work Experience in New Digital Media |
| ARCT 16 Drawing: Perspective               |
| ARDT 20 Design: Two Dimension              |
| PHOT 10 Beginning Photography              |
| Total Units 39.0                           |

| **Animation - Digital 3-Dimensional**     |
| Commercial and Entertainment Arts         |
| Certificate 61012                         |
| The Digital 3-D Certificate provides training in 3-D animation including character modeling, lighting, texture, environment and special effects that lead to creative careers in film, television and the video game industry. The Animation Program offers an integrated/interdisciplinary approach to prepare students to meet current and future job market demands. The student will be given a balanced blend of art and technology-based skills which are essential for today's careers in animation. The program offers an A.S. Degree and three Certificates. Course content is driven by industry needs in order to provide the student with the best possible preparation for a career in animation. |
| Requirements for the Certificate          |
| Required courses:                        |
| ANIM 101 Drawing - Gesture and Figure 3.0 CSU |
| ANIM 104 Drawing Fundamentals 3.0 CSU     |
| ANIM 108 Principles of Animation 3.0 CSU  |
| ANIM 115 Storyboarding 3.0                |
| ANIM 116 Character Development 1.5        |
| ANIM 120 Introduction to 3-D Computer Animation |
| ANIM 122 Modeling, Texture Mapping and Lighting 3.0 |
| ANIM 134 Visual Effects I: Dynamics 1.5  |
| ANIM 135 Visual Effects II: Particle Systems 1.5 |
| ANIM 136 Animation Environment Layout 3.0 |
| ANIM 145 Advanced 3-D Modelling 3.0       |
| ANIM 146 3-D Animation 3.0                |
| ANIM 148 Demo-Reel                         |
| ARCT 70 Computer Graphics: Introduction 3.0 CSU |
| ARTD 17A Drawing: Life 3.0 CSU,UC         |
| Total Units 39.0                           |

| Recommended Electives:                    |
| ANIM 107 Figure in Motion                 |
| ANIM 109 Advanced Principles of Animation |
| ANIM 119 Portfolio                         |
| ARCT 66 Portfolio                          |
| ANIM 137C Work Experience in New Digital Media |
| ARCT 16 Drawing: Perspective               |
| ANIM 137B Work Experience in New Digital Media |
| ARCT 16 Drawing: Perspective               |
| PHOT 10 Beginning Photography              |
| Total Units 39.0 - 40.5                    |

**Animation - Traditional**

**Commercial and Entertainment Arts**

**Certificate 61010**

The Traditional Certificate provides training based around the principles of storytelling and animation. These skills lead to careers in television, film, Internet and gaming as an animator, character designer, storyboard artist, layout artist or director.

The Animation Program offers an integrated/interdisciplinary approach to prepare students to meet current and future job market demands. The student will be given a balanced blend of art and technology-based skills which are essential for today's careers in animation. The program offers an A.S. Degree and three Certificates. Course content is driven by industry needs in order to provide the student with the best possible preparation for a career in animation.

**Requirements for the Certificate**

**Required courses:**

- ANIM 101 Drawing - Gesture and Figure 3.0 CSU
- ANIM 104 Drawing Fundamentals 3.0 CSU
- ANIM 108 Principles of Animation 3.0 CSU
- ANIM 115 Storyboarding 3.0
- ANIM 116 Character Development 1.5
- ANIM 117 Animation Background Layout 3.0
- ANIM 119 Portfolio 1.5
- ARCT 66 Portfolio 3.0
- ANIM 120 Script Development for Animation 3.0
- ANIM 122 Modeling, Texture Mapping and Lighting 3.0
- ANIM 134 Visual Effects I: Dynamics 1.5
- ANIM 135 Visual Effects II: Particle Systems 1.5
- ANIM 136 Animation Environment Layout 3.0
- ANIM 145 Advanced 3-D Modelling 3.0
- ANIM 146 3-D Animation 3.0
- ANIM 148 Demo-Reel 1.5
- ARCT 70 Computer Graphics: Introduction 3.0 CSU
- ARTD 17A Drawing: Life 3.0 CSU,UC
- Total Units 39.0

**Recommended Electives:**

- ANIM 107 Figure in Motion
- ANIM 109 Advanced Principles of Animation
- ANIM 119 Portfolio
- ARCT 66 Portfolio 3.0
- ANIM 137B Work Experience in New Digital Media...
- ARCT 70 Computer Graphics: Introduction 3.0 CSU
- ARTD 17A Drawing: Life 3.0 CSU,UC
- ARTD 20 Design: Two Dimensional
- PHOT 10 Beginning Photography
- Total Units 39.0 - 40.5
Programs of Study Leading to a Certificate

Recommended Electives:
- ANIM 107 Figure in Motion
- ANIM 130 Introduction to 3-D Computer Animation
- ANIM 137A Work Experience in New Digital Media
- ANIM 137B Work Experience in New Digital Media
- ANIM 137C Work Experience in New Digital Media
- ARTD 17B Drawing: Life
- ARTS 22 Design: Two Dimensional
- ARTS 41A Sculpture: Life
- PHTO 8 Digital Photography

Architectural Technology - Level I
Architecture and Engineering
Design Department
Certificate 60201

This multi-level certificate program prepares students to enter the field of architecture and related areas. The student is provided with an option of direct employment in the field or preparation for transfer to the professional school of architecture. The Level I certificate provides a broad overview of the fundamental skills essential to the field, suitable for entry-level employment as an office assistant.

Requirements for the Certificate

Required courses:
- ARCH 10 Design I - Elements of Design 3.0 CSU
- ARCH 11 Architectural Drawing 3.0 CSU, UC
- ARCH 12 Architectural Materials and Specifications 3.0 CSU
- ARCH 16 Basic CAD and Computer Application 4.0 CSU, UC

Plus the following courses:
- ENGL 68 Preparation for College Writing 4.0
- MATH 51 Elementary Algebra 4.0

Total Units 21.0

Architectural Technology - Technology Concentration Level II
Architecture and Engineering
Design Department
Certificate 60203

This Level II Technology Concentration Certificate focuses upon the preparation of architectural construction documents, with emphasis on computer-aided design (CAD) applications. Regulatory requirements and an overview of construction practices are also included. The student will prepare a portfolio of CAD documentation, including 2-D and 3-D projections. The Level II Technology Concentration Certificate prepares students for employment as a beginning CAD draftsman or production specialist.

Requirements for the Certificate

Required courses:
- Completion of the Architectural Technology Level I course work (21) units.

PLUS
- ARCH 14 Building and Zoning Codes 3.0
- ARCH 15 Architectural Working Drawings - I 3.0 CSU
- ARCH 18 Architectural Computer Aided Design Elements 3.0
- ARCH 26 Architectural CAD Working Drawings 3.0
- EDT 20 Technical Descriptive Geometry 3.0 CSU
- INS 70 Elements of Construction 3.0 CSU

Plus the following courses:
- ARCH 28 Architectural CAD 3-D 3.0 CSU
- ARCH 29 Design IV - Advanced Project 3.0 CSU

PLUS
- Select one (1) course from:
  - ARCH 13 Architectural Illustration 3.0 CSU, UC
  - ARCH 21 Design II - Architectural Design 3.0 CSU
  - ARCH 23 Architectural Presentations 3.0 CSU
  - ARCH 31 World Architecture I 3.0 CSU, UC
  - ARCH 32 World Architecture II 3.0 CSU, UC
  - ARCH 89 Architectural Work Experience 1.0
  - ARCH 90 Architectural Work Experience - I 2.0
  - EDT 26 Civil Engineering Technology and CAD 3.0 CSU

Total Units 50.0 - 52.0

Architectural Technology - Design Concentration Level II
Architecture and Engineering
Design Department
Certificate 60205

This Level II Design Concentration Certificate focuses upon studio design, drawing, and presentation skills, including model-making, sketching and computer applications. The student will prepare a portfolio of creative design assignments. The Level II Design Concentration Certificate prepares students for employment as a design assistant or presentation specialist.

Requirements for the Certificate

Required courses:
- Completion of the Architectural Technology Level II course work (43) units.

ARCH 14 Building and Zoning Codes 3.0
ARCH 15 Architectural Working Drawings - I 3.0 CSU
ARCH 18 Architectural Computer Aided Design Elements 3.0
ARCH 26 Architectural CAD Working Drawings 3.0
EDT 20 Technical Descriptive Geometry 3.0 CSU
INS 70 Elements of Construction 3.0 CSU

Plus the following courses:
- ARCH 28 Architectural CAD 3-D 3.0 CSU
- ARCH 29 Design IV - Advanced Project 3.0 CSU

PLUS
- Select one (1) course from:
  - ARCH 13 Architectural Illustration 3.0 CSU, UC
  - ARCH 21 Design II - Architectural Design 3.0 CSU
  - ARCH 23 Architectural Presentations 3.0 CSU
  - ARCH 31 World Architecture I 3.0 CSU, UC
  - ARCH 32 World Architecture II 3.0 CSU, UC
  - ARCH 89 Architectural Work Experience 1.0
  - ARCH 90 Architectural Work Experience - I 2.0
  - EDT 26 Civil Engineering Technology and CAD 3.0 CSU

PLUS
- Select three (3) units from:
  - ARTD 15A Drawing: Beginning 3.0 CSU, UC
  - ARTD 20 Design: Two Dimensional 3.0 CSU, UC
  - ARTS 22 Design: Three Dimensional 3.0 CSU, UC

Total Units 42.0

Architectural Technology - Design Concentration Level III
Architecture and Engineering
Design Department
Certificate 60206

The Level III Design Concentration Certificate provides additional expertise in portfolio development and professional practice. The Level III Design Concentration Certificate prepares students for employment as an intermediate design assistant or presentation specialist.

Requirements for the Certificate

Required courses:
- Completion of the Architectural Technology Design Concentration course work (42) units.

ARCH 14 Building and Zoning Codes 3.0
ARCH 15 Architectural Working Drawings - I 3.0 CSU
ARCH 26 Architectural CAD Working Drawings 3.0
ARCH 29 Design IV - Advanced Project 3.0 CSU

PLUS
- Select one (1) course from:
  - ARCH 27 Design III - Environmental Design 3.0 CSU, UC
  - ARCH 29 Design IV - Advanced Project 3.0 CSU

Total Units 50.0 - 52.0

Architectural Technology - Design Concentration Level III
Architecture and Engineering
Design Department
Certificate 60205
Students completing the Level III Certificate will have knowledge and practical experience in business communications and computer use. Successful completion of this certificate prepares students to handle the increasing diversity and complexity of modern human resource management. Completing the advanced certificate will help those working in the human resource field prepare for professional certification by the Human Resource Certification Institute.

Requirements for the Certificate

Required courses:
Completion of Human Resource Management - Level I and Level II course work (18 Units) as follows:

- BUSM 20 Principles of Business 3.0 CSU,UC
- BUSM 61 Business Organization and Management 3.0 CSU
- BUSM 62 Human Resource Management 3.0

Level I as follows:

- BUSM 20 Principles of Business 3.0 CSU,UC

Plus the following courses:

- BUSM 61 Business Organization and Management 3.0 CSU
- BUSM 62 Human Resource Management 3.0

Special Information:
Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

Business: International - Level II
Accounting and Management Department Certificate 60507

In the Business: International - Level II Certificate student will learn methods and approaches to managing the complexities of doing business in an international environment. Students acquire both theoretical knowledge and practical skills related to managing and marketing within the global arena. Students completing the Level II Certificate will have knowledge and practical experience in business and an emphasis on the small business perspective.

Requirements for the Certificate

Required courses:
Completion of the Business: International - Level I course work (9 units) as follows:

- BUSM 20 Principles of Business 3.0 CSU,UC
- BUSM 51 Principles of International Business 3.0 CSU
- BUS 36 Principles of Marketing 3.0

PLUS
Select one (1) course from:

- BUSM 66 Small Business Management 3.0 CSU
- BUSM 61 Business Organization and Management 3.0 CSU
- BUSM 62 Human Resource Management 3.0

Total Units 18.0 - 19.0

Special Information:
Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

Business: International - Level III
Accounting and Management Department Certificate 60528

Upon completion of the Business: International Level III Certificate, students will have acquired the specific skills needed to successfully complete international business transactions. Students will gain a practical, hands-on perspective of how to compete in a global system of conflicting laws, regulations, and requirements. Completion of the Business: International - Level I and II course work (18 units) as follows:

Requirements for the Certificate

Required courses:
Level I as follows:

- BUSM 20 Principles of Business 3.0 CSU,UC
- BUSM 51 Principles of International Business 3.0 CSU
- BUS 36 Principles of Marketing 3.0

PLUS
Select one (1) course from:

- BUSM 66 Small Business Management 3.0 CSU
- BUSM 61 Business Organization and Management 3.0 CSU
- BUSM 62 Human Resource Management 3.0

Total Units 25.0

Special Information:
Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.
### Programs of Study Leading to a Certificate

#### Business: Management - Level II

**Accounting and Management Department Certificate 60506**

This certificate builds upon the Level I Certificate to provide students with proven business tools that will enhance their management careers. Students will be exposed to projects and business simulations that will lead to measurable successes. Business presentations, business planning, team building, conflict resolution, and computer use are core skills developed in this certificate.

**Requirements for the Certificate**

**Required courses:**
- Completion of Business: Management Level I course work (9 units) as follows:
  - BUSM 20 Principles of Business: 3.0 CSU,UC
  - BUSM 61 Business Organization and Management: 3.0 CSU
  - BUS 36 Principles of Marketing: 3.0 CSU
- **Plus the following courses:**
  - BUSM 60 Human Relations in Business: 3.0 CSU
  - BUSM 62 Human Resource Management: 3.0 CSU
  - CISB 15 Microcomputer Applications: 4.0 CSU,UC

**Total Units 19.0**

**Special Information:**
Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

#### Business: Retail Management - Level III

**Accounting and Management Department Certificate 60521**

Introductory statement: Students completing the advanced Level III Certificate will have knowledge and practical experience in business communication, leadership and financial controls. Successful completion of this certificate prepares students to handle the increasing diversity and complexity of modern retail management.

**Requirements for the Certificate**

**Required courses:**
- Completion of the Retail Management - Level II course work (18.5 Units) as follows:
  - BUSO 25 Business Communications: 3.0 CSU
  - BUSO 50 Retail Store Management and Merchandising: 3.0
  - FASH 62 Retail Store Management and Merchandising: 3.0 CSU
  - CISB 15 Microcomputer Applications: 4.0 CSU,UC
- **Plus the following courses:**
  - BUSA 11 Fundamentals of Marketing: 3.0
  - BUSA 61 Business Organization and Management: 3.0 CSU
  - BUSA 62 Human Resource Management: 3.0
  - BUS 36 Principles of Marketing: 3.0 CSU

**Total Units 22.0**

**Special Information:**
Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

### Business: Management - Level III

**Accounting and Management Department Certificate 60526**

Upon completion of the Business: Management - Level III Certificate, students will have a foundation of management strategies and practices which will enable them to prosper in an ever-changing business environment. Students will have a strategic perspective of production, marketing, accounting, international business and human resources. Completion of the Business: Management - Level III Certificate will lead to new opportunities and provide students with a solid foundation upon which to build a career.

**Requirements for the Certificate**

**Required courses:**
- Completion of the Business: Management - Level I and Level II course work (18.5 Units) as follows:
  - BUSM 20 Principles of Business: 3.0 CSU,UC
  - BUSM 61 Business Organization and Management: 3.0 CSU
  - BUS 36 Principles of Marketing: 3.0 CSU
- **Level II as follows:**
  - BUSM 60 Human Relations in Business: 3.0 CSU
  - BUSM 62 Human Resource Management: 3.0 CSU
  - CISB 15 Microcomputer Applications: 4.0 CSU,UC
- **Total Units 30.0**

**Special Information:**
Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

### Business: Small Business Management - Level II

**Accounting and Management Department Certificate 60508**

The Business: Small Business Management - Level II Certificate provides students with practical small business tools. This certificate focuses on issues such as motivation, teamwork, and leadership skills that lead to enhanced productivity through the development of people. Completion of this certificate will lead to new career opportunities for those currently employed in the small business arena.

**Requirements for the Certificate**

**Required courses:**
- Completion of Business: Small Business Management - Level II course work (9 Units) as follows:
  - BUSM 20 Principles of Business: 3.0 CSU,UC
  - BUSM 66 Small Business Management: 3.0 CSU
  - BUS 36 Principles of Marketing: 3.0 CSU
- **Plus the following courses:**
  - BUS 25 Business Communications: 3.0 CSU
  - BUSO 25 Retail Store Management and Merchandising: 3.0
  - FASH 62 Retail Store Management and Merchandising: 3.0 CSU
  - CISB 15 Microcomputer Applications: 4.0 CSU,UC
- **Total Units 18.0**

**Special Information:**
Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

#### Business: Small Business Management - Level III

**Accounting and Management Department Certificate 60530**

Upon completion of the Business: Small Business Management - Level III Certificate, students will have built a foundation of management strategies and practices which will enable them to prosper in an ever-
changing small business environment. Computer skills applicable to small business will be developed. Students will have a strategic perspective across all small business functions. Students will acquire the skills and abilities necessary to build a successful small business career.

### Requirements for the Certificate

**General - Level I, as follows:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSM 20</td>
<td>Principles of Business</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
<tr>
<td>BUSM 66</td>
<td>Small Business Management</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
</tbody>
</table>

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSM 60</td>
<td>Human Relations in Business</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>BUSM 61</td>
<td>Business Organization and Management</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>BUSM 62</td>
<td>Human Resource Management</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Special Information:

Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.

### Children's Program Certificate:

**Administration Certificate 61313**

The Children's Program Certificate: Administration Specialization is designed for the student who desires general knowledge about Early Childhood Development and skills in administering programs for young children. This certificate meets or exceeds Title 22 education requirements for Center Director. Direct experience with children is highly recommended to complete preparation to be an effective administrator.

### Requirements for the Certificate

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CHLD 1</td>
<td>Child, Family and Community</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
<tr>
<td>CHLD 5</td>
<td>Principles/Practices</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
</tbody>
</table>

**Plus the following courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 6</td>
<td>Survey of Child Development Programs</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
<tr>
<td>CHLD 10H</td>
<td>Child Growth and Development - Honors</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
<tr>
<td>CHLD 64</td>
<td>Health, Safety and Nutrition of Young Children</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
<tr>
<td>CHLD 68</td>
<td>Children With Special Needs</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>CHLD 84</td>
<td>Guidance &amp; Discipline in Child Development Settings</td>
<td>1.0</td>
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</tbody>
</table>

**PLUS**

**Select three (3) courses from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 61</td>
<td>Language Arts &amp; Art Media for Young Children</td>
<td>3.0</td>
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<tr>
<td>CHLD 62</td>
<td>Music and Motor Development for Young Children</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHLD 63</td>
<td>Creative Science and Math for Young Children</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHLD 73</td>
<td>Infant/Toddler Care and Development</td>
<td>3.0</td>
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</tr>
<tr>
<td>CHLD 64</td>
<td>Health, Safety and Nutrition of Young Children</td>
<td>3.0</td>
<td></td>
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<tr>
<td>CHLD 68</td>
<td>Children With Special Needs</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHLD 84</td>
<td>Guidance &amp; Discipline in Child Development Settings</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHLD 71B</td>
<td>Management/Marketing/Personnel for ECD Programs</td>
<td>3.0</td>
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<tr>
<td>CHLD 75</td>
<td>Supervising Adults in Early Childhood Settings</td>
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</table>

**Total Units** 28.0

### Children's Program Certificate: General - Level II

**Child Development Certificate 61328**

This certificate enhances the student's knowledge beyond Level I, providing additional skills in working with your children.

### Requirements for the Certificate

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 1</td>
<td>Child, Family and Community</td>
<td>3.0</td>
<td>CSU,UC</td>
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<tr>
<td>CHLD 5</td>
<td>Principles/Practices</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>CHLD 6</td>
<td>Survey of Child Development Programs</td>
<td>3.0</td>
<td>CSU</td>
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</tr>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
<tr>
<td>CHLD 64</td>
<td>Health, Safety and Nutrition of Young Children</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
<tr>
<td>CHLD 68</td>
<td>Children With Special Needs</td>
<td>3.0</td>
<td>CSU</td>
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</tr>
<tr>
<td>CHLD 84</td>
<td>Guidance &amp; Discipline in Child Development Settings</td>
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**PLUS**

**Select three (3) courses from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>CHLD 10H</td>
<td>Child Growth and Development - Honors</td>
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<tr>
<td>CHLD 64</td>
<td>Health, Safety and Nutrition of Young Children</td>
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<td></td>
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<tr>
<td>CHLD 71A</td>
<td>Child Growth and Development</td>
<td>3.0</td>
<td>CSU,UC</td>
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</tr>
</tbody>
</table>

**Total Units** 43.0

### Children's Program Certificate: General - Level III

**Child Development Certificate 61327**

This third level of the Children's Program Certificate: General is expected to meet or exceed Title 5 education requirements for Assistant Teacher, Associate Teacher, and Teacher (with 16 units of G.E.)

### Requirements for the Certificate

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSM 60</td>
<td>Human Relations in Business</td>
<td>3.0</td>
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<tr>
<td>BUSM 66</td>
<td>Small Business Management</td>
<td>3.0</td>
<td>CSU</td>
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<tr>
<td>BUSO 5</td>
<td>Business English</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHLD 1</td>
<td>Child, Family and Community</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
<tr>
<td>CHLD 5</td>
<td>Principles/Practices</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>CHLD 6</td>
<td>Survey of Child Development Programs</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
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</tbody>
</table>

**PLUS**

**Select one (1) course from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 61</td>
<td>Language Arts &amp; Art Media for Young Children</td>
<td>3.0</td>
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<tr>
<td>CHLD 62</td>
<td>Music and Motor Development for Young Children</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CHLD 63</td>
<td>Creative Science and Math for Young Children</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHLD 73</td>
<td>Infant/Toddler Care and Development</td>
<td>3.0</td>
<td></td>
<td></td>
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</tbody>
</table>

**Total Units** 19.0

### Programs of Study Leading to a Certificate

**Children's Program Certificate: Small Business Management**

The Children’s Programs Small Business Management Certificate provides information for operating or owning a preschool.

### Requirements for the Certificate

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 1</td>
<td>Child, Family and Community</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
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<tr>
<td>CHLD 5</td>
<td>Principles/Practices</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>CHLD 6</td>
<td>Survey of Child Development Programs</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
</tbody>
</table>

**PLUS**

**Select one (1) course from:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU,UC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 6</td>
<td>Survey of Child Development Programs</td>
<td>3.0</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development</td>
<td>3.0</td>
<td>CSU,UC</td>
<td></td>
</tr>
<tr>
<td>CHLD 7</td>
<td>Management/Marketing/Personnel for ECD Programs</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Units** 30.0
Programs of Study Leading to a Certificate

Child Development Certificate 61312

The Children's Program Certificate: Teaching Specialization is designed for the student who desires knowledge about Early Childhood Development and skills for teaching young children. This certificate meets or exceeds Title 22 education requirements for fully qualified teachers and is expected to meet or exceed Title 5 education requirements for Teacher Level (with 16 units of G.E.

Requirements for the Certificate

**Required courses:**

- **CHLD 71B** Management/Marketing/Personnel for ECD Programs
- **FCS 41** Life Management
- **Total Units** 3.0

**Recommended Electives:**

- **BUSS 70** Payroll and Tax Accounting
- **BUSL 18** Business Law - Honors
- **BUSL 18** Business Law - Honors
- **BUSM 20** Principles of Business
- **BUSM 61** Business Organization and Management
- **BUSS 25** Business Communications
- **BUSS 33** Advertising and Promotion
- **BUSS 36** Principles of Marketing
- **CISB 11** Computer Information Systems

**Children’s Program Certificate: Teaching**

**Certificate 61312**

The Children’s Program Certificate: Teaching Specialization is designed for the student who desires knowledge about Early Childhood Development and skills for teaching young children. This certificate meets or exceeds Title 22 education requirements for fully qualified teachers and is expected to meet or exceed Title 5 education requirements for Teacher Level (with 16 units of G.E., English, math or Science, Social Science and Humanities).

**Requirements for the Certificate**

**Required courses:**

- **CHLD 51** Early Literacy in Child Development
- **CHLD 61** Language Arts & Art Media for Young Children
- **CHLD 62** Music and Motor Development for Young Children
- **CHLD 63** Creative Science and Math for Young Children
- **CHLD 91** Early Childhood Development Field Work
- **Total Units** 30.0

**Plus**

- Select two (2) courses from:
  - **CHLD 51** Early Literacy in Child Development
  - **CHLD 61** Language Arts & Art Media for Young Children

**Total Units** 39.0

**Computer and Networking Technology - Level I**

**Electronics and Computer Technology Department Certificate 60725**

The Computer and Networking Technology Certificate prepares students to enter the computer and networking fields as service technicians. The program provides foundations in basic electronics, computer servicing, operating systems, network/server servicing, security systems, and customer relations skills. The student will be prepared to perform installation, software configuration, and the maintenance, operation, troubleshooting, and repair of computers and their associated networking software/hardware. In addition, the student is prepared to take the A+, Network+, Server+, and Security+ certification tests offered at testing centers throughout the country. These certifications are worldwide-recognized industry benchmarks for the computer and networking technician. Further, the student will have the requisite skills upon which to build in order to seek additional certifications.

**Requirements for the Certificate**

**Required courses:**

- **CNET 50** PC Servicing
- **CNET 52** Operating Systems
- **CNET 54** PC Troubleshooting
- **CNET 60** A+ Certification Preparation
- **ELEC 11** Technical Applications in Microprocessors
- **CNET 15** Microcomputer Applications
- **CNET 30** Computer Networks
- **CNET 34** Server+ Certification
- **CNET 36** Security+ Certification
- **TECH 60** Customer Relations

**Total Units** 30.0 - 31.0

**Recommended Electives:**

- **CISB 11** Computer Information Systems
- **CISB 15** Microcomputer Applications
- **ELEC 50** Electronic Circuits (DC)
- **ELEC 50B** Electronic Circuits (AC)
- **ELEC 56** Digital Electronics
- **CNET 50** PC Servicing
- **CNET 52** Operating Systems
- **CNET 54** PC Troubleshooting
- **CNET 60** A+ Certification Preparation
- **ELEC 11** Technical Applications in Microprocessors
- **CNET 15** Microcomputer Applications
- **CNET 30** Computer Networks
- **CNET 34** Server+ Certification
- **CNET 36** Security+ Certification
- **TECH 60** Customer Relations

**Total Units** 44.0 - 45.0

**Computer and Networking Technology - Level II**

**Electronics and Computer Technology Department Certificate 60726**

The Computer and Networking Technology Certificate prepares students to enter the computer and networking fields as service technicians. The program provides foundations in basic electronics, computer servicing, operating systems, network/server servicing, security systems, and customer relations skills. The student will be prepared to perform installation, software configuration, and the maintenance, operation, troubleshooting, and repair of computers and their associated networking software/hardware. In addition, the student is prepared to take the A+, Network+, Server+, and Security+ certification tests offered at testing centers throughout the country. These certifications are worldwide-recognized industry benchmarks for the computer and networking technician. Further, the student will have the requisite skills upon which to build in order to seek additional certifications.

**Requirements for the Certificate**

**Required courses:**

- **CNET 50** PC Servicing
- **CNET 52** Operating Systems
- **CNET 54** PC Troubleshooting
- **CNET 60** A+ Certification Preparation
- **ELEC 11** Technical Applications in Microprocessors
- **CNET 15** Microcomputer Applications
- **CNET 30** Computer Networks
- **CNET 34** Server+ Certification
- **CNET 36** Security+ Certification
- **TECH 60** Customer Relations

**Total Units** 30.0 - 31.0

**Recommended Electives:**

- **CISB 11** Computer Information Systems
- **CISB 15** Microcomputer Applications
- **ELEC 50** Electronic Circuits (DC)
- **ELEC 50B** Electronic Circuits (AC)
- **ELEC 56** Digital Electronics
- **CNET 50** PC Servicing
- **CNET 52** Operating Systems
- **CNET 54** PC Troubleshooting
- **CNET 60** A+ Certification Preparation
- **ELEC 11** Technical Applications in Microprocessors
- **CNET 15** Microcomputer Applications
- **CNET 30** Computer Networks
- **CNET 34** Server+ Certification
- **CNET 36** Security+ Certification
- **TECH 60** Customer Relations

**Total Units** 44.0 - 45.0

**Computer Graphic Design/Photography**

**Commercial and Entertainment Arts Certificate 61005**

The Computer Graphics Certificate will enable the student to develop specific computer skills needed for employment subsequent to completion of the required courses. The Computer Graphics Certificate is an option under the existing Photography program. Those anticipating a Baccalaureate Degree should be guided in their selection of lower-division courses by an advisor of the catalog of the institution they expect to enter.

**Requirements for the Certificate**

**Required courses:**

- **GRAP 10** Photo Editing with Photoshop
- **GRAP 12** Advanced Photo Editing with Photoshop
- **GRAP 14** Digital Color Management
- **GRAP 16** Digital Image Design with Illustrator & Freehand

**Total Units** 4.0

**Recommended Electives:**

- **GRAP 10** Photo Editing with Photoshop
- **GRAP 12** Advanced Photo Editing with Photoshop
- **GRAP 14** Digital Color Management
- **GRAP 16** Digital Image Design with Illustrator & Freehand

**Total Units** 4.0
Further examination, the N.A.R.T.E. 3rd Class Technician program are automatically eligible to receive, without and a two-year certificate with the same title as the A.S. available: a one-year certificate in Electronics Technology circuits. Two additional certificate programs are also curriculum encompasses advanced coursework in available for those students who do not complete all This curriculum is one of three advanced systems options required number of units be taken at Mt. San Antonio College and that in each course taken toward a certificate, a grade of "C" or better must be earned. Students who are in the last semester of a certificate program must complete an Application for Certificate form, available at the Admissions and Records Office, in order to be awarded the Certificate.

## Requirements for the Certificate

**Required courses:**

- BUSL 18 Business Law, or 3.0 CSU,UC
- BUSL 18H Business Law - Honors 3.0 CSU,UC
- BUSB 108 Business Law - Honors 3.0 CSU
- BUSB 60 Human Relations in Business 3.0 CSU
- FCS 41 Life Management 3.0 CSU
- FCS 80 Financial Planning 3.0 CSU
- BUSA 71 Financial Planning 3.0 CSU
- FCS 91 Work Experience in Family and Consumer Sciences or
- BUS 36 Paralegal Internship 1.0

### PLUS

Select two (2) courses from:

- BUSO 5 Business English 3.0
- BUSO 25 Business Communications 3.0 CSU
- COMP 12 Office Computer Applications 4.0 CSU,UC or
- CSIB 15 Microcomputer Applications 4.0 CSU,UC

**Total Units 28.0**

## Construction Inspection

**Architecture and Engineering Design Department Certificate 60920**

This program is intended to prepare students for employment following completion of courses. Students desiring a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

### Required courses:

- ARCH 12 Architectural Materials and Specifications 3.0 CSU
- ARCH 14 Building and Zoning Codes 3.0
- INS 17 Legal Aspects of Construction 3.0 CSU
- INS 70 Elements of Construction 3.0 CSU
- INS 71 Construction Estimating 3.0 CSU
- INS 87 Fundamentals of Construction Inspection 3.0
- MATH 51 Elementary Algebra 4.0

**Total Units 22.0**

### Recommended Electives:

- ARCH 11 Architectural Drawing
- ARCH 15 Architectural Working Drawings - I
- EDT 26 Civil Engineering Technology and CAD
- INS 67 Reading Construction Drawings

## Consumer Services

### Consumer Science and Design Technologies Certificate 61321

This program provides semi-professional training for those who seek immediate employment with the public sector or business establishments such as finance, retail, utilities and telecommunications. Students desiring a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

- The possession of a certificate of proficiency is favorably recognized by government, business, and industry and is frequently a requirement for professional advancement. Additional courses beyond those required will enhance student's knowledge in a specialty area. Consult with a professor of Family and Consumer Sciences for further information.

### Requirements for the Certificate

**Required courses:**

- ADJU 68 Administration of Justice 3.0

CSU General Education Counseling and Guidance Department Certificate 60100

Completion of coursework for this certificate is intended for students who are planning to transfer to one of the campuses of the California University System. In most instances, completion for this certificate will assist students in transferring without the need to take additional lower-division general education courses to satisfy university general education requirements. Note: This certificate signifies completion of the CSU general education requirements. Only transfer students must generally also satisfy lower-division requirements in a specific major in order to be able to transfer with junior-level status. It is highly recommended that all students intending to transfer consult with Counseling and Advising Services, and that they refer to the current catalog of their specific transfer university for requirements, see page 104 of this catalog.
### Programs of Study Leading to a Certificate

#### Database Management Systems

**Certificate 60703**

This certificate program is intended to prepare students to work with database management systems on both microcomputers and mainframes.

**Requirements for the Certificate**

**Required courses:**
- CSIS 11 Computer Information Systems 3.5 CU,UC
- CSIS 10 Database Management 4.0 CU
- CSIS 11 Advanced Database Management - Microcomputers 4.0
- CSIS 31 Database Management 4.0
- CSIS 32 Oracle Forms and Reports 4.0
- CSIS 40 Database Design 2.0
- CSIS 50 Web Based Applications With PL/SQL 4.0
- CISM 11 Systems Analysis and Design 3.5 CU,UC
- CISM 14 Computer Information Systems Seminar 4.0
- CISM 21 Client/Server Architecture 4.0

Total Units: **37.0**

#### Electronic Systems Technology - Level II

**Certificate 60928**

The Level II certification (12-13 units) adds customer relations skills and the installation, calibration, setup and repair of home theater, home automation, and home security systems. Either a course on preparing for the C-7 license or troubleshooting digital TV with LCD, plasma and DLP displays is included.

**Requirements for the Certificate**

**Required courses:**
- ELEC 11 Technical Applications in Microcomputers 3.0 CU
- CISP 15 Microcomputer Applications 4.0 CU,UC
- EST 50 Electrical Fundamentals for Cable Installations 4.0
- EST 52 Fabrication Techniques for Cable Installations 4.0
- EST 54 Wiring and Wiring Standards 4.0

Total Units: **30.0**

**Recommended Electives:**
- EST 51 Early Literacy in Child Development 3.0 CU
- CHLD 64 Health and Nutrition of Young Children 3.0 CU
- LIT 40 Children’s Literature 3.0
- PE 3 First Aid and CPR 3.0

#### Electronics and Computer Engineering Technology

**Certificate 60906**

This curriculum starts with basic electronic components and circuitry, culminates with course work in electronic systems, and is characterized by advanced coursework in three major areas. These include microprocessors and interfacing, electronic communications and industrial electronic controls. Students completing the program will have training in all the major areas of electronics and will possess ample skills to make them versatile employees. Nearly all labs have new, state-of-the-art equipment to provide the student with quality hands-on learning experiences.

This program is intended to prepare students for employment in electronic industries or for transfer into electronic and computer engineering technology or industrial technology programs at various institutions in the CSU system. Many of the courses directly articulate to the CSU system. Many of the courses directly articulate to the CSU system. The curriculum includes both analog and digital forms of communications (AM/FM, SSB, PAM, PCM, etc.). Analog and digital multiplexing is also covered. The curriculum culminates with microwave communications coursework that includes radar, PCS, GPS, and satellite operations. Two additional certificate programs are also available; a one-year certificate in Electronics Technology, and a two-year certificate having the same title as the A.S. Degree.

All students completing an Electronic A.S. Degree program are automatically eligible to receive, without further examination, the N.A.R.T.E. 4th Class Technician License. All students completing certificate programs are automatically eligible to receive, without further examination, the N.A.R.T.E. 4th Class Technician License.

### Educational Paraprofessional - Level II

**Certificate 62108**

This certificate program is intended to prepare students to work with young children to enhance their learning and development. Students will be able to assist classroom teachers in working with children of all ages and backgrounds, including students with special needs. This certificate provides graduates with skills in math and English, as well as understandings in learning and teaching styles. It may be used as eligibility for position advancement.

**Requirements for the Certificate**

**Required courses:**
- CHLD 1 Child, Family and Community 3.0 CU,UC
- EDUC 10 Introduction to Education 3.0 CU,UC
- ENGL 68 English - Writing 3.0
- MATH 51 Elementary Algebra 4.0

### Electronics Communications

**Certificate 60904**

This curriculum is one of three advanced systems options available for those students who do not complete all advanced systems courses at once, or who complete them one at a time. The Electronics Communications curriculum encompasses advanced coursework in electronics communications. This includes both land-based and wireless forms of communications. The curriculum includes both analog and digital forms of communications (AM/FM, SSB, PAM, PCM, etc.). Analog and digital multiplexing is also covered. The curriculum culminates with microwave communications coursework that includes radar, PCS, GPS, and satellite operations. Two additional certificate programs are also available; a one-year certificate in Electronics Technology, and a two-year certificate having the same title as the A.S. Degree.

All students completing an Electronic A.S. Degree program are automatically eligible to receive, without further examination, the N.A.R.T.E. 4th Class Technician License. All students completing certificate programs are automatically eligible to receive, without further examination, the N.A.R.T.E. 4th Class Technician License.
Applications are accepted on a rolling basis, and all students completing certificate programs are automatically eligible to receive, without further examination, the N.A.R.T.E. 3rd Class Technician License. Those completing the Certificate 60905 are also eligible for the N.A.R.T.E. 4th Class Technician License.

For more information, please contact the Admissions and Records Office, 3811 E. Garey St., Suite 100, Rancho Cucamonga, CA 91709, (909) 556-7117, Ext. 4750.

Section 7
Programs of Study Leading to a Certificate

EXAMPLE: Mt. San Antonio College Technology and Health Division 1100 North Grand Avenue Walnut CA 91789-1399

8) A physical examination, proof of certain immunizations, and a criminal background check are required of all candidates after acceptance to the program and before entrance into the clinical setting. Forms and information will be provided upon acceptance into the program. In addition, drug testing may be required as part of the physical examination and/or requested by the college or one of its agents.

Entrance Procedure:
In determining eligibility, consideration will be given to the following:
1) Completion of all application requirements
2) EMS-related experience
3) Scores on the English assessment and math placement tests
4) Performance in the pre-course, EMS I—Fundamentals for Paramedics. This course tests prerequisite knowledge base in medical terminology, anatomy and physiology, EMT basic knowledge and basic math skills in preparation for drug calculations.

All Applicants are required to meet the Essential Functions for Success in the Paramedic Program: anatomy and physiology, EMT basic knowledge and basic math skills in preparation for drug calculations.

Physical Demands:
- Perform prolonged, extensive, or considerable reaching, stooping, bending, and/or transferring patients
- Posess the ability to perform fine motor movements
- Posess the ability for extremely heavy effort (lift and carry at least 125 pounds)
- Perform comfortable reaching, stooping, bending, kneeling, and crouching

Sensory Demands:
- Color vision: ability to distinguish and identify colors (may be corrected with adaptive devices)
- Distance vision: ability to see clearly 20 feet or more
- Depth perception: ability to judge distance and space relationships
- Near vision: ability to see clearly 20 inches or less

Hearing: able to recognize a full range of tones

Working Environment:
- May be exposed to infectious and contagious diseases, without prior notification
- Regularly exposed to the risk of blood borne diseases
- Exposed to hazardous agents, body fluids and wastes
- Exposed to odorous chemicals and specimens
- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, cultural, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end of life issues
- Exposure to products containing latex

English Language Skills:
Although proficiency in English is not a criteria for admission into the nursing program, students are encouraged to be able to speak, write and read English to complete classes successfully and to ensure safety for themselves and for others.

Engineering Design Technology - Level I

Certificate 60900
The Engineering Design Technology Level I Certificate is designed to provide focused technical grounding and exposes students to parametric design technology. This certificate allows students to pursue competitive employment in the technical design field, beyond entry level.

Requirements for the Certificate

Required courses:
EDT 11 Technical Engineering Drawing I 3.0 CSU
EDT 12 Technical Engineering Drawing II 3.0 CSU
EDT 14 Mechanical Design 3.0 CSU
EDT 16 Basic CAD and Computer Applications 4.0 CSU
EDT 18 Engineering CAD applications 4.0 CSU

PLUS
Select one (1) course from:
ELEC 50A Electronic Circuits (DC) 4.0 CSU
MFG 11 Manufacturing Processes I 2.0 CSU

Total Units 19.0 - 21.0

Engineering Design Technology - Level II

Architecture and Engineering Design Department
Certificate 60915
The Engineering Design Technology Level II Certificate is designed to provide focused technical grounding and exposes students to parametric design technology. This certificate allows students to pursue competitive employment in the technical design field, beyond entry level.

Requirements for the Certificate

Required courses:
Level I as follows:
EDT 11 Technical Engineering Drawing I 3.0 CSU
EDT 12 Technical Engineering Drawing II 3.0 CSU
EDT 14 Mechanical Design 3.0 CSU
EDT 16 Basic CAD and Computer Applications 4.0 CSU
EDT 18 Engineering CAD Applications 4.0 CSU
MFG 11 Manufacturing Processes I 2.0 CSU
ELEC 50A Electronic Circuits (DC) 4.0 CSU

Plus the following courses:
EDT 20 Technical Descriptive Geometry 3.0 CSU
EDT 24 Engineering CAD 3-D Solids and Surfaces 3.0 CSU
ELEC 50B Electronic Circuits (AC) 4.0 CSU
MFG 11 Manufacturing Processes I 2.0 CSU
ELEC 50A Electronic Circuits (DC) 4.0 CSU

Total Units 37.0 - 41.0

Engineering Design Technology - Level III

Architecture and Engineering Design Department
Certificate 60916
The Engineering Design Technology Level III Certificate focuses on the civil and structural design fields, emphasizing three-dimensional illustration and animation. This certificate allows students to pursue employment in the civil design fields.

Requirements for the Certificate

Required courses:
Level I as follows:
EDT 11 Technical Engineering Drawing I 3.0 CSU
EDT 12 Technical Engineering Drawing II 3.0 CSU
EDT 14 Mechanical Design 3.0 CSU
EDT 16 Basic CAD and Computer Applications 4.0 CSU
EDT 18 Engineering CAD Applications 4.0 CSU
MFG 11 Manufacturing Processes I 2.0 CSU
ELEC 50A Electronic Circuits (DC) 4.0 CSU

Required courses:
Level II as follows:
EDT 20 Technical Descriptive Geometry 3.0 CSU
EDT 24 Engineering CAD 3-D Solids and Surfaces 3.0 CSU
ELEC 50B Electronic Circuits (AC) 4.0 CSU
MFG 11 Manufacturing Processes I 2.0 CSU
EDT 26 Civil Engineering Technology and CAD 3.0 CSU
EDT 28 Engineering CAD 3-D Illustration/Animation 3.0 CSU

Total Units 37.0 - 41.0

Escrow Management
Business Administration Department
Certificate 60511

Requirements for the Certificate

Required courses:
BUS 11 Fundamentals of Accounting 3.0 CSU
BUS 50 Real Estate Principles 3.0 CSU
BUS 51 Legal Aspects of Real Estate 3.0 CSU
The Fashion Design: Level II Certificate builds upon the Consumer Science and Design Technologies - Fashion Design - Level II

CHLD 66L Early Childhood Development 1.0 CSU
CHLD 66 Early Childhood Development 2.0 CSU
CHLD 50 Multicultural Education: 3.0
Select one (1) course from:
PLUS
CHLD 84 Guidence and Discipline in Child Development Settings

Requirements for the Certificate

Required courses:
FASH 8 Introduction to Fashion 3.0 CSU
FASH 10 Clothing Construction I 3.0 CSU
FASH 12 Clothing Construction II 3.0 CSU
FASH 15 Fashion Strategies 3.0 CSU
FASH 17 Textiles 3.0 CSU
FASH 30 Fashion Design 3.0

Plus the following courses:
FASH 9 History of Costume and Fashion 3.0 CSU
FASH 62 Retail Store Management and Merchandising, 3.0 CSU
FIRE 6 Hazardous Materials/ICS 3.0
PLUS Select two (2) courses from:
FIRE 7 Fire Fighting Tactics and Strategy 3.0 CSU
FIRE 8 Fire Company Organization and Management
FIRE 9 Fire Hydraulics 3.0 CSU
FIRE 10 Arson and Fire Investigation 3.0 CSU
FIRE 11 Fire Apparatus and Equipment 3.0 CSU
FIRE 12 Wildland Fire Control 4.0 CSU
FIRE 66 Basic Fire Academy 12.0
PE-F 53 Physical Training for the Basic Fire Academy 2.5 CSU

Total Units 27.0

Recommended Electives:
FASH 25 Fashion Computer-Assisted Drawing
FASH 26 Fashion Computer-Assisted Design
FASH 81 Work Experience in Fashion
FASH 82 Work Experience in Fashion
FASH 83 Work Experience in Fashion
FASH 90 Field Studies
FASH 91 Field Studies - New York
FASH 92 Field Studies - Fashion Capitals

Fire Technology
Fire Technology Department Certificate 62105

The Fire Science Certificate has been developed to offer pre-employment education for the undergraduate who desires to enter the field of fire science. It also provides the employed firefighter an opportunity for a professional education. Students intending to pursue a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Certificate

Required courses:
FIRE 1 Fire Protection Organization 3.0 CSU
FIRE 2 Fire Prevention Technology 3.0 CSU
FIRE 3 Fire Protection Equipment and Systems
FIRE 4 Building Construction for Fire Protection 3.0 CSU
FIRE 5 Fire Behavior and Combustion 3.0 CSU
FIRE 6 Hazardous Materials/ICS 3.0

Total Units 23.5 - 34.0

Recommended Electives:
PE-F 50 Physical Skills Preparation for Administration of Justice and Fire Technology
PE-F 51 Agility Testing Preparation for Administration of Justice and Fire Technology
PE-F 52 Fitness and Conditioning for Administration of Justice, Fire Technology, and Forestry
SPAN 66 Spanish for Fire and Police Personnel

Floral Design
Agricultural Sciences Department Certificate 60113

This certificate program is designed to give students basic skills in floral design for employment in retail shops or mass merchandising of products. All courses are applicable for degree requirements.

Requirements for the Certificate

Required courses:
AGAB 20 Microcomputer Applications in Agriculture 3.0 CSU/UC
AGOR 1 Horticultural Science 3.0 CSU
AGOR 15 Interior Landscaping 3.0
AGOR 25 Floral Design I 3.0 CSU
### Horse Ranch Management

**Agricultural Sciences Department Certificate 60102**

This certificate program is designed to give students basic skills on horse ranches and agriculture sales and services. All courses are applicable for degree requirements.

**Requirements for the Certificate**

**Required courses:**
- AGAB 20 Microcomputer Applications 3.0 CSU, UC
- AGAG 59 Work Experience in Agriculture 1.0
- AGAG 60 Work Experience in Agriculture 2.0
- AGAG 62 Work Experience in Agriculture 4.0
- AGAN 2 Animal Nutrition 3.0 CSU
- AGAN 94 Animal Breeding 3.0
- AGLI 16 Horse Production 4.0 CSU, UC
- AGLI 18 Horse Ranch Management 4.0 CSU
- AGLI 19 Horse Hoof Care 2.0 CSU
- AGLI 97 Artificial Insemination of Livestock 2.0
- AGAN 94 Animal Breeding 3.0
- AGLI 19 Horse Hoof Care 2.0 CSU
- AGLI 97 Artificial Insemination of Livestock 2.0

**Total Units 21.0**

### Hospitality: Hospitality Management - Level II

**Consumer Science and Design Technologies Certificate 61325**

This certificate prepares the holder to enter the hospitality field as a manager-trainee in a hotel or restaurant.

**Requirements for the Certificate**

**Required courses:**
- HRM 51 Introduction to Hospitality 3.0 CSU
- HRM 53 Dining Room Service Management 3.0 CSU
- HRM 54 Basic Cooking Techniques 3.0 CSU
- HRM 91 Work Experience 1.0 CSU in Restaurant/Hospitality

**Total Units 20.5**

### Hospitality: Restaurant Management - Level II

**Consumer Science and Design Technologies Certificate 61319**

The Hospitality: Restaurant Management - Level II Certificate prepares the holder to enter the restaurant field as a manager-trainee in a in a food service establishment.

**Requirements for the Certificate**

**Required courses:**
- HRM 51 Introduction to Hospitality 3.0 CSU
- HRM 52 Food Safety and Sanitation 1.5 CSU
- HRM 53 Dining Room Service Management 3.0 CSU
- HRM 54 Basic Cooking Techniques 3.0 CSU
- HRM 57 Restaurant Cost Control 3.0 CSU
- HRM 61 Menu Planning 3.0 CSU
- NF 28 Cultural and Ethnic Foods 3.0 CSU, UC

**Total Units 19.5**

### Infant/Toddler Development

**Child Development Certificate 61318**

The Infant/Toddler Certificate (30 units) provides the holder with specialized skills for working with children of that age. This certificate meets or exceeds Title 22 requirements and Title 5 Master Teacher - Infant/Toddler Specialization (with 16 units of general education).

**Requirements for the Certificate**

**Required courses:**
- CHLD 1 Child, Family and Community 3.0 CSU, UC
- CHLD 5 Principles/Practices in Child Development Programs 3.0 CSU
- CHLD 6 Survey of Child Development Curriculum 3.0 CSU
- CHLD 10 Child Growth and Development 3.0 CSU, UC
- CHLD 10H Child Growth and Development Honors 3.0 CSU, UC
- CHLD 73 Infant/Toddler Care and Development 3.0 CSU
- CHLD 85 Infants At Risk 3.0

**PLUS**

Select four (4) courses from:
- CHLD 50 Multicultural Education: Anti-Bias Perspective 3.0
- CHLD 61 Language Arts & Art Media for Young Children 3.0
- CHLD 62 Music and Motor Development for Young Children 3.0 CSU
- CHLD 64 Health, Safety and Nutrition of Young Children 3.0
- CHLD 72 Teacher, Parent and Child Relationships 3.0

**Total Units 19.0**

### Interior Design - Kitchen And Bath Design

**Consumer Science and Design Technologies Certificate 61302**

This Mt. SAC Kitchen and Bath Design Certificate program provides for immediate opportunity to seek employment in the area of Kitchen and Bath Design. This certificate program is endorsed by the National Kitchen and Bath Association. Students completing all courses for this certificate will earn four (4) NKBA credits toward eligibility for professional certification as a Certified Kitchen Designer or Certified Bath Designer. Please see a professor of Interior Design or contact the NKBA for professional certification eligibility requirements beyond this program.

**Requirements for the Certificate**

**Required courses:**
- ARCH 13 Architectural Illustration 3.0 CSU
- ARCH 23 Architectural Presentations 3.0 CSU
- BUSM 60 Human Relations in Business 3.0 CSU
- BUSM 66 Small Business Management 3.0 CSU
- BUSM 70 Bookkeeping - Accounting 2.0
- BUSM 80 Retail Store Management and Merchandising 3.0 CSU
**Interior Design Level I - Merchandising**

Consumer Science and Design Technologies
Certificate 61322

This program is intended to prepare students for employment as assistants and sales personnel for interior design products. The Interior Design program works within a Regional Interior Design Consortium of nearby community colleges. Many of the required courses may also be offered at the following community colleges: Fullerton, Long Beach City, Orange Coast, and Saddleback, and will meet the requirements of the Mt. SAC program. Regional course numbers have an ID (Interior Design) prefix. Some Mt. San Antonio College courses are offered by other departments and are identified by Mt. San Antonio College prefixes and numbers. These courses have the regional identification course number (RID) in parenthesis following their course title.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Required courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of the Interior Design Level I - Merchandising course work (25 units) as follows:</td>
</tr>
<tr>
<td>ARCH 11 Architectural Drawing 3.0 CSU,UC</td>
</tr>
<tr>
<td>ARCH 16 Basic CAD 4.0 CSU</td>
</tr>
<tr>
<td>BUS 35 Professional Selling 3.0 CSU</td>
</tr>
<tr>
<td>ID 100 Fundamentals of Interior Design 3.0 CSU</td>
</tr>
<tr>
<td>ID 105 Interior Design Studio I 2.0 CSU</td>
</tr>
<tr>
<td>ID 120 Interior Design Careers 2.0 CSU</td>
</tr>
<tr>
<td>ID 130 Applied Color and Design Theory 4.0 CSU</td>
</tr>
<tr>
<td>ID 150 Interior Materials and Products 4.0 CSU</td>
</tr>
</tbody>
</table>

**Total Units** 25.0

**Interior Design Level II - Design**

Consumer Science and Design Technologies
Certificate 61330

This program is available as a certificate for students who have previous A.A., A.S. or Bachelor's Degree in another discipline. This program is designed to meet the professional requirements for entrance into an interior design career as an assistant interior designer. The Interior Design program works within a Regional Interior Design Consortium of nearby community colleges. Many of the required courses may also be offered at the following community colleges: Fullerton, Long Beach City, Orange Coast, and Saddleback, and will meet the requirements of the Mt. SAC program. Regional course numbers have an ID (Interior Design) prefix. Some Mt. San Antonio College courses are offered by other departments and are identified by Mt. San Antonio College prefixes and numbers. These courses have the regional identification course number (RID) in parenthesis following their course title.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Required courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level II as follows:</td>
</tr>
<tr>
<td>ID 13 Architectural Illustration 3.0 CSU,UC</td>
</tr>
<tr>
<td>ID 15 Architectural Working 3.0 CSU</td>
</tr>
<tr>
<td>ID 170 Space Planning 3.0 CSU</td>
</tr>
<tr>
<td>ID 180 History of Interior Architecture &amp; Furnishings I 3.0 CSU</td>
</tr>
<tr>
<td>ID 190 History of Interior Architecture &amp; Furnishings II 3.0 CSU</td>
</tr>
<tr>
<td>ID 210 Fundamentals of Lighting 3.0</td>
</tr>
<tr>
<td>ID 215 Interior Design Studio II 2.0 CSU</td>
</tr>
<tr>
<td>ID 220 Business and Professional Practice 3.0</td>
</tr>
<tr>
<td>ID 240A Interior Design Internship Seminar 1.0</td>
</tr>
<tr>
<td>ID 240B Interior Design Internship 1.0</td>
</tr>
</tbody>
</table>

**Total Units** 50.0

**Interior Design Level III - Professional Designation**

Consumer Science and Design Technologies
Certificate 61301

This program has been aligned with California State University Dominguez Hills (CSUDH) to offer students either a Bachelor of Arts (BA) in Interdisciplinary Studies through PACE (Program for Adult College Education) or a Bachelor of Science (BS) in Applied Studies. Students must complete the Mt. San Antonio College (or Regional) Interior Design A.S. Degree major requirements and Mt. SAC general education requirements to transfer into either of the CSUDH programs. While completing the Bachelor’s Degree program at CSUDH, students must complete 16 units of credit in Interior Design at Mt. SAC or another college within the Regional Interior Design Program. Upon completion of the Bachelor Degree, the student may request a Professional Designation in Interior Design from the Interior Design program at Mt. SAC. Students already holding a Bachelor Degree may also apply for the Professional Designation in Interior Design after completing the requirements listed below.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Required courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of the Interior Design Level I - Merchandising course work (25 units) as follows:</td>
</tr>
<tr>
<td>ARCH 11 Architectural Drawing 3.0 CSU,UC</td>
</tr>
<tr>
<td>ARCH 16 Basic CAD and Computer Application 4.0 CSU,UC</td>
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</tr>
<tr>
<td>ID 120 Interior Design Careers 2.0 CSU</td>
</tr>
<tr>
<td>ID 130 Applied Color and Design Theory 4.0 CSU</td>
</tr>
<tr>
<td>ID 150 Interior Materials and Products 4.0 CSU</td>
</tr>
</tbody>
</table>

**Total Units** 50.0

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**Programs of Study Leading to a Certificate**

**Interior Landscaping**

Agricultural Sciences Department
Certificate 60106

This certificate program is designed to give students basic skills in the design, installation, and maintenance of interior plants that are used in residences, offices, hotels, malls, restaurants, and other locations. All courses are applicable for degree requirements.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Required courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 1 Horticultural Science 3.0 CSU</td>
</tr>
<tr>
<td>AGOR 13 Landscape Design 3.0 CSU</td>
</tr>
<tr>
<td>AGOR 15 Interior Landscaping 3.0</td>
</tr>
<tr>
<td>AGOR 24 Integrated Pest Management 3.0 CSU</td>
</tr>
<tr>
<td>AGOR 29 Ornamental Plants - Herbsaceous 3.0 CSU,UC</td>
</tr>
<tr>
<td>AGOR 32 Landscaping and Nursery Management 3.0 CSU</td>
</tr>
<tr>
<td>AGOR 62 Landscape Irrigation - Design and Installation 3.0</td>
</tr>
<tr>
<td>AGOR 64 Landscape Irrigation - Drip and Low Volume 3.0</td>
</tr>
</tbody>
</table>

**Total Units** 24.0

**Intersegmental General Education Transfer (IGETC)**

Counseling and Guidance Department
Certificate 60101

Completion of coursework for this certificate is intended for students who are planning to transfer to a public four-year university within California. Most students who follow IGETC are planning to transfer to a University of California campus, but this pattern is also accepted by the California State University system. Completion of courses for this certificate will permit students to transfer without the need to take additional lower-division general education courses to satisfy university general education requirements. Note: This certificate signifies completion of the IGETC general education requirements ONL Y; transfers students must generally also satisfy lower-division requirements in a specific major in order to be able to transfer with junior-level status. Not all UC campuses or all majors will accept the completion of this pattern as
Programs of Study Leading to a Certificate

Landscape and Park Maintenance
Agricultural Sciences Department
Certificate 60106
This certificate program is designed to give students basic skills in the maintenance of landscapes and parks. All courses are applicable for degree requirements.

Requirements for the Certificate
Required courses:
AGOR 1 Horticultural Science 3.0 CSU
AGOR 24 Integrated Pest Management 3.0 CSU
AGOR 29 Ornamental Plants - Herbaceous 3.0 CSU, UC
AGOR 30 Ornamental Plants - Trees and Woody Shrubs 3.0 CSU, UC
AGOR 39 Turf Grass Production 3.0 CSU
AGOR 40 Sports Turf Management 3.0
AGOR 51 Tractor and Landscape Equipment Operations 3.0 CSU
AGOR 62 Landscape Irrigation - Design and Installation 3.0 CSU
AGOR 63 Landscape Irrigation Systems Management 3.0
AGOR 71 Landscape Construction 3.0 CSU
AGOR 72 Landscape Hardscape Fundamentals 3.0 CSU

Total Units 30.0

Landscape Design and Construction
Agricultural Sciences Department
Certificate 60109
This certificate program is designed to give students basic skills needed in employment for a landscape contractor. All courses are applicable for degree requirements.

Requirements for the Certificate
Required courses:
AGOR 1 Horticultural Science 3.0 CSU
AGOR 13 Landscape Design 3.0 CSU
AGOR 15 Landscape Irrigation - Design and Installation 3.0 CSU
AGOR 16 Landscape Irrigation Equipment Operations 3.0 CSU
AGOR 17 Landscape Irrigation Systems Management 3.0
AGOR 18 Landscape Irrigation Fundamentals 3.0 CSU
AGOR 24 Integrated Pest Management 3.0 CSU
AGOR 30 Ornamental Plants - Trees and Woody Shrubs 3.0 CSU, UC
AGOR 31 Soil Science and Management 3.0 CSU, UC

Total Units 31.0 - 34.0

Landscape Equipment Technology
Agricultural Sciences Department
Certificate 60117
This certificate program is designed to give students basic skills to seek employment in equipment repair, golf courses, rental yards, and small equipment repair shops. All courses are applicable for degree requirements.

Requirements for the Certificate
Required courses:
AGOR 1 Horticultural Science 3.0 CSU
AGOR 13 Landscape Design 3.0 CSU
AGOR 15 Landscape Irrigation - Design and Installation 3.0 CSU
AGOR 16 Landscape Irrigation Equipment Operations 3.0 CSU
AGOR 17 Landscape Irrigation Systems Management 3.0
AGOR 18 Landscape Irrigation Fundamentals 3.0 CSU
AGOR 24 Integrated Pest Management 3.0 CSU
AGOR 30 Ornamental Plants - Trees and Woody Shrubs 3.0 CSU, UC
AGOR 31 Soil Science and Management 3.0 CSU, UC

Total Units 27.0

Landscape Irrigation
Agricultural Sciences Department
Certificate 60110
This certificate program is designed to give students basic skills in irrigation design, repair, installation, water management, and troubleshooting. A student could seek employment with a landscape contractor, schools, parks, and cities. All courses are applicable for degree requirements.

Requirements for the Certificate
Required courses:
AGOR 1 Horticultural Science 3.0 CSU
AGOR 13 Landscape Design 3.0 CSU
AGOR 39 Turf Grass Production and Management 3.0 CSU
AGOR 50 Soil Science and Management 3.0 CSU, UC
AGOR 51 Tractor and Landscape Equipment Operations 3.0 CSU
AGOR 62 Landscape Irrigation - Design and Installation 3.0 CSU
AGOR 63 Landscape Irrigation Systems Management 3.0
AGOR 64 Landscape Irrigation - Drip and Low Volume 3.0
AGOR 71 Landscape Construction 3.0 CSU
AGOR 72 Landscape Hardscape Fundamentals 3.0 CSU

Total Units 27.0

Law Enforcement
Public Services Department
Certificate 62102
This program is intended to prepare students for employment following graduation. Students desiring a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Certificate
Required courses:
ADJU 1 The Administration of Justice System 3.0 CSU, UC
ADJU 2 Principles and Procedures of the Justice System 3.0 CSU
ADJU 3 Concepts of Criminal Law 3.0 CSU, UC
ADJU 4 Legal Aspects of Evidence 3.0 CSU
ADJU 5 Community Relations 3.0 CSU, UC
ADJU 68 Administration of Justice Report Writing 3.0

PLUS
Select four (4) courses from:
ADJU 6 Concepts of Enforcement Services 3.0
ADJU 13 Concepts of Traffic Services 3.0
ADJU 20 Principles of Investigation 3.0 CSU
ADJU 38 Narcotics Investigation 3.0
ADJU 59 Gangs in the Community/ Corrections 3.0 CSU
ADJU 74 Vice Control 3.0
CORS 30 Ethnic Relations in Corrections 3.0
CORS 40 Crime and Delinquency 3.0
CORS 45 The Violent Offender 3.0

Total Units 30.0

Recommended Electives:
PE-F 50 Physical Skills Preparation for Law Enforcement and Fire Science
PE-F 51 Agility Testing Preparation for Law Enforcement and Fire Science
PE-F 52 Fitness and Conditioning for Law Enforcement, Fire Science and Forestry
SPAN 66 Spanish for Fire and Police Personnel

Legal Office Specialist
Office Technology Department
Certificate 60519
This program is intended to prepare students for employment as entry-level legal office assistants, legal secretaries, administrative assistants, legal office managers, or other office support staff where legal knowledge is required. Training in a variety of computer and clerical skills, and law office procedures is emphasized. Students desiring a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Certificate
Required courses:
BUSO 5 Business English 3.0
BUSO 25 Business Communications 3.0 CSU
COMP 1 Computer Keyboarding 4.0 CSU
COMP 2 Intermediate Computer Keyboarding 4.0
COMP 11 Internet Research for Business 2.0 CSU
COMP 12 Office Computer Applications 4.0 CSU, UC
CORS 30 Concepts of Criminal Law 3.0 CSU, UC
CORS 28 Microcomputer Applications 4.0 CSU
CORS 29 Word for the Business Professional 4.0
CORS 68 Office Management Skills 3.0
CORS 68 Transcription Techniques 3.0
Livestock Management

Agricultural Sciences Department
Certificate 60103

This certificate program is designed to give students basic skills in livestock management for employment opportunities on farms, ranches, and agriculture sales and services. All courses are applicable for degree requirements.

Requirements for the Certificate

Required courses:
- AGAB 20 Microcomputer Applications 3.0 CSU,UC in Agriculture
- AGAG 1 Food Production, Land Use 3.0 CSU,UC and Politics - A Global Perspective
- AGAG 91 Agricultural Calculations 3.0
- AGAN 1 Animal Science 3.0 CSU,UC
- AGAN 2 Animal Nutrition 3.0 CSU
- AGAN 94 Animal Breeding 3.0
- AGLI 14 Swine Production 3.0 CSU
- AGLI 16 Horse Production 4.0 CSU,UC
- AGLI 17 Sheep Production 3.0 CSU
- AGLI 30 Beef Production 3.0 CSU
- AGLI 34 Livestock Judging and Selection 2.0 CSU,UC
- AGLI 96 Animal Sanitation and Disease Control 3.0 CSU

PLUS

Select six (6) units from:
- AGOR 71 Landscape Construction Fundamentals 3.0 CSU
- BUSM 26 Small Business Management 3.0 CSU
- BUSS 35 Professional Selling 3.0 CSU
- BUSS 36 Principles of Marketing 3.0 CSU

Total Units 42.0

Note: The core courses for the Legal Office Specialist certificate are equivalent to the courses required for the Administrative Assistant Levels I and II certificates.

Programs of Study Leading to a Certificate

Manufacturing Technology

Aircraft Maintenance Tech & Manufacturing Dept.
Certificate 60918

The primary purpose of this program is to emphasize the manipulative skills required to enter the field of machine metal worker, machine operator, production machinist, mechanical technician, or machinist.

Requirements for the Certificate

Required courses:
- MFG 11 Manufacturing Processes I 2.0 CSU
- MFG 12 Manufacturing Processes II 2.0 CSU
- MFG 15 AutoCAD 2D 2.0
- MFG 17 3-D CAD - Mechanical Modeling 2.0
- MFG 19 Parametric Solid Modeling for Manufacturing 2.0
- MFG 38 MasterCAM I 2.0 CSU
- MFG 38B Advanced MasterCAM 2.0 CSU
- MFG 39 SurfCAM I 2.0 CSU
- MFG 39B SurfCAM II 2.0 CSU
- MFG 58 Blueprint Reading for Manufacturing 2.0
- MFG 70 Technical Mathematics - Manufacturing Applications 2.0 CSU
- MFG 85 Manual CNC (Computerized Numerical Control) Operations 2.0 CSU

PLUS

Select two (2) courses from:
- MFG 25 Advanced Parametric Solid 2.0 Modeling for Manufacturing
- MFG 27 Autodesk Inventor 2.0
- WELD 40 Introduction to Welding 2.0 CSU

Total Units 28.0

Marketing Management

Business Administration Department
Certificate 60510

Requirements for the Certificate

Required courses:
- BUSM 20 Principles of Business 3.0 CSU,UC
- BUSM 61 Business Organization and Management 3.0 CSU
- BUSS 35 Professional Selling 3.0 CSU
- BUSS 36 Principles of Marketing 3.0 CSU
- BUSS 50 Retail Store Management and Merchandising 3.0
- BUSS 70 International Marketing Concepts 3.0
- BUSS 79 Work Experience in Marketing Management 1.0
- BUS 85 Special Issues in Marketing 2.0
- CSB 15 Microcomputer Applications 4.0 CSU,UC

Total Units 25.0

Medical Office Specialist

Office Technology Department
Certificate 60523

This program is intended to prepare students for employment as entry-level medical office assistants, medical receptionists, administrative assistants - medical, medical office managers, or other office support staff in the medical field. Training in a variety of computer and clerical skills is emphasized. Students desiring a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Certificate

Required courses:
- BUSA 72 Bookkeeping - Accounting 5.0
- BUS 5 Business English 3.0
- BUS 25 Business Communications 3.0 CSU
- COMP 1 Computer Keyboarding 4.0 CSU
- COMP 2 Intermediate Computer Keyboarding 4.0
- COM 12 Office Computer Applications 4.0 CSU,UC
- CSB 15 Microcomputer Applications 4.0 CSU,UC
- COMP 18 Data Entry 3.0
- COMP 20 Word for the Business Professional 4.0
- COMP 28 Office Management Skills 3.0
- COMP 68 Transcription Techniques 3.0
- MEDI 90 Medical Terminology 3.0 CSU

Total Units 39.0

Note: The core courses for the Medical Specialist for Psychiatric Technicians certificate are equivalent to the courses required for the Administrative Assistant Levels I and II certificates.

Mental Health Technology - Psychiatric Technician

Psychiatric Technician Department
Certificate 61209

Completion of coursework leads to an Associate in Science Degree. The Psychiatric Technology Program will prepare students to take the California State Licensure Examination for Psychiatric Technicians.

Requirements for the Certificate

Required courses:
- MENT 40 Introduction to Interviewing and Counseling 3.0
- PSYC 40 Introduction to Interviewing and Counseling 3.0
- MENT 56 Medical-Surgical Nursing for Psychiatric Technicians 9.0
- MENT 56L Clinical Experience 4.0
- MENT 58D Advanced Medical-Surgical Nursing and Pharmacology for PT 4.0
- MENT 58L Advanced Medical-Surgical Nursing for Psychiatric Technicians Clinical 1.5
- MENT 70 Introduction to Psychiatric Technology 1.5
- MENT 70L Introduction to Psychiatric Technology Clinical Technicians 2.0
- MENT 72 Nursing Care of the Developmentally Disabled Person 7.0
- MENT 72L Psychiatric Nursing for Psychiatric Technicians Clinical 5.0
- MENT 73T Psychiatric Nursing for Psychiatric Technicians Clinical 6.0
- MENT 82 Work Experience in Mental Health Technology 2.0
- PSYC 1A Introduction to Psychology 3.0 CSU,UC

Total Units 53.0

Special Information:
To remain in the program, students must maintain a “C” or better grade in all courses.

The student will qualify to take the California State Board Examination upon completion of all the above courses.

Entrance Requirements:
In addition to meeting Mt. San Antonio College’s academic standards for admission, applicants must be in good standing and satisfy the following requirements:

a) Be a high school graduate or equivalent. (All students who have taken coursework outside of the United States must have their transcript evaluated. Foreign transcripts will not be accepted without the evaluation.)
b) Be 18 years of age.
c) File a college application and be accepted as a student at Mt. San Antonio College.
Programs of Study Leading to a Certificate

d) Submit an application for the Mental Health/Psychiatric Technician Program to the Technology and Health Division Office (909) 594-5611, ext. 4750. All applications are dated upon receipt in the Technology and Health Division Office. A program begins each fall and spring semester.

e) Take the required English Placement Test (AWE). Eligibility for ENGL 68 is advised.

If you have already taken a college placement exam within the past two years at another school, arrange to have your test scores forwarded to the Technology and Health Division Office. (If you were tested at Mt. San Antonio College, the office will obtain the test scores as long as an Application for Admission is on file with the Admissions and Records Office.)

Testing is administered by the Assessment Center, located in the Student Services Center. Arrangements should be made with them to schedule a day and time to take the English Placement Test, if required. The Assessment Center is open Monday through Friday. You may contact them at (909) 594-5611, Ext. 4265.

f) Forward two official transcripts of all coursework completed (high school, nursing school, and other than Mt. San Antonio College courses.) One transcript must be sent to the Technology and Health Division Office and the other to the Admissions and Records Office.

g) For students who possess a college degree, the English Placement Test is not required. However, it will be necessary for a student to obtain two official copies of the college transcript showing the degree issued. One transcript must be sent to the Technology and Health Division Office and the other to the Admissions and Records Office.

NOTE: Concerning Entrance Requirements ‘e’ and ‘f’, if the course(s) were taken and/or the degree obtained at Mt. San Antonio College, it is not necessary to request transcripts.

Indicate in the mailing address the program for which your transcript is being sent to the Technology and Health Division Office.

EXAMPLE: Mt. San Antonio College Technology and Health Division Psychiatric Technician Program 1100 North Grand Avenue Walnut, CA 91789-1399

h) A physical examination, including specific immunizations, and consent/disclaimer for Hepatitis A/B vaccine is required of all candidates prior to beginning classes. Students must provide proof that he/she does not have Tuberculosis. These requirements are in accordance with the healthcare agency policy that insures that students are in good health and free from communicable disease and able to perform their training functions. Drug testing may also be required as part of this physical examination. Proof of high school graduation and malpractice insurance are required of all candidates upon acceptance.

i) Certain convictions may prevent a candidate from being licensed as a Psychiatric Technician.

j) All students may be required to complete a background check prior to entering the clinical education phase.

Selection Procedure:
In determining eligibility of an applicant, consideration will be given to satisfactory scores on the English Placement Test.

The College will make every effort to notify the applicant of acceptance by mail no less than two months prior to the beginning of a program. All Applicants are required to meet the Essential Functions for Success in the Mental Health Technology - Psychiatric Technician Program.

Physical Demands:
- Perform prolonged, extensive, or considerable standing/walking, lifting, positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability for extremely heavy effort (lift and carry at least 125 pounds)
- Perform considerable reaching, stooping, bending, kneeling, and crouching

Sensory Demands:
- Color vision: ability to distinguish and identify colors (may be corrected with adaptive devices)
- Distance vision: ability to see clearly 20 feet or more
- Depth perception: ability to judge distance and space relationships
- Near vision: ability to see clearly 20 inches or less
- Hearing: able to recognize a full range of tones

Working Environment:
- May be exposed to infectious and contagious disease, without prior notification
- Regularly exposed to the risk of blood borne diseases
- Exposed to hazardous agents, body fluids and waste
- Exposed to odorous chemicals and specimens
- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end of life issues
- Exposure to products containing latex

English Language Skills:
Although proficiency in English is not a criteria for admission into the nursing program, students are encouraged to be able to speak, write and read English to complete classes successfully and to ensure safety for themselves and for others.

Microcomputer Productivity Software Certificate 60702
This certificate program is intended to prepare students to use the most popular microcomputer productivity software packages and operating systems: DOS, Microsoft Windows, Microsoft Word, Corel WordPerfect, Microsoft Excel or Lotus 1-2-3, and Microsoft Access.

Requirements for the Certificate

Required courses:
- CISB 13 Microsoft Windows 2.0
- CISN 21 Windows Operating System 4.0
- CISB 15 Microcomputer Applications 4.0
- CISB 16 Microsoft Excel 4.0
- CISD 11 Database Management 4.0
- CISW 11 The Internet 4.0
- COMP 50 Desktop Presentations Using PowerPoint 4.0

Total Units 22.0 - 24.0

Nursery Management
Agricultural Sciences Department
Certificate 60107
This certificate program is designed to give students basic skills in production and marketing of plants and dry goods in the wholesale and retail nursery industry. All courses are applicable for degree requirements.

Requirements for the Certificate

Required courses:
- AGOR 1 Horticultural Science 3.0
- AGOR 2 Plant Propagation/Greenhouse Management 3.0
- AGOR 24 Integrated Pest Management 3.0
- AGOR 29 Ornamental Plants - Herbaceous 3.0
- AGOR 30 Ornamental Plants - Trees and Woody Shrubs 3.0
- AGOR 32 Landscaping and Nursery Management 3.0
- AGOR 39 Turf Grass Production and Management 3.0
- AGOR 62 Landscape Irrigation - Design and Installation 3.0
- AGOR 64 Landscape Irrigation - Drip and Low Volume 3.0

Total Units 27.0

Park Management
Agricultural Sciences Department
Certificate 60116
This certificate program is designed to give students skills required for entry level positions in park management. Emphasis is placed on positions that are at the city and county level. All courses are applicable for degree requirements.

Requirements for the Certificate

Required courses:
- AGOR 1 Horticultural Science 3.0
- AGOR 4 Park Management 3.0
- AGOR 5 Park Facilities 3.0
- AGOR 24 Integrated Pest Management 3.0
- AGOR 30 Ornamental Plants - Trees and Woody Shrubs 3.0
- AGOR 39 Turf Grass Production and Management 3.0
- AGOR 51 Tractor and Landscape Equipment Operations 3.0
- AGOR 62 Landscape Irrigation - Design and Installation 3.0
### Pet Science

**Agricultural Sciences Department**

**Certificate 60104**

This certificate program is designed to give students basic skills in production and marketing of pets at the wholesale and retail level. All courses are applicable for degree requirements.

**Requirements for the Certificate**

**Required courses:**
- AGAB 20 Microcomputer Applications 3.0 CSU,UC in Agriculture
- AGAN 1 Animal Science 3.0 CSU,UC
- AGAN 2 Animal Nutrition 3.0 CSU,UC
- AGAN 51 Animal Handling and Restraint 3.0 CSU
- AGAN 94 Animal Breeding 3.0
- AGLI 96 Animal Sanitation and Disease Control 3.0 CSU
- AGPE 70 Pet Shop Management 3.0
- AGPE 71 Canine Management 3.0
- AGPE 72 Feline Management 3.0
- AGPE 73 Tropical and Coldwater Fish Management 2.0
- AGPE 74 Reptile Management 2.0
- AGPE 75 Urban Arboriculture 3.0
- AGPE 76 Aviculture - Cage and Aviary Birds 3.0
- BUSM 66 Small Business Management 3.0 CSU
- AGPE 72 Feline Management 3.0
- AGPE 73 Tropical and Coldwater Fish Management 2.0
- AGPE 74 Reptile Management 2.0
- AGPE 76 Aviculture - Cage and Aviary Birds 3.0
- BUSM 66 Small Business Management 3.0 CSU

**Total Units 30.0**

### Pet Science

**Agricultural Sciences Department**

**Certificate 61002**

This certificate program is designed to give students basic skills in production and marketing of pets at the wholesale and retail level. All courses are applicable for degree requirements.

**Requirements for the Certificate**

**Required courses:**
- AGAN 51 Animal Handling and Restraint 3.0 CSU
- AGAN 94 Animal Breeding 3.0
- AGAN 96 Animal Sanitation and Disease Control 3.0 CSU
- AGPE 70 Pet Shop Management 3.0
- AGPE 71 Canine Management 3.0
- AGPE 72 Feline Management 3.0
- AGPE 73 Tropical and Coldwater Fish Management 2.0
- AGPE 74 Reptile Management 2.0
- AGPE 76 Aviculture - Cage and Aviary Birds 3.0
- BUSM 66 Small Business Management 3.0 CSU

**Total Units 27.0**

### Photography

**Commercial and Entertainment Arts**

**Certificate 60709**

This certificate program is intended to prepare students to work in Visual Basic which is used to develop graphical user interfaces and client/server applications.

**Requirements for the Certificate**

**Required courses:**
- CISB 11 Computer Information Systems 3.5 CSU,UC
- CSID 11 Database Management 4.0 CSU - Microcomputers
- CISM 11 Systems Analysis and Design 3.5 CSU,UC
- CISM 14 Computer Information Systems Seminar 4.0
- CISM 21 Client/Server Architecture 4.0
- CISP 11 Basic Programming 4.0 CSU,UC
- CISP 14 Advanced Basic Programming 4.0 CSU,UC

**Total Units 27.0**

### Programming In C++

**Computer Information Systems Department**

**Certificate 60704**

This certificate program is intended to prepare students to use the C++ programming language in a business environment.

**Requirements for the Certificate**

**Required courses:**
- CSB 11 Computer Information Systems 3.5 CSU,UC
- CSID 11 Database Management 4.0 CSU - Microcomputers
- CISM 11 Systems Analysis and Design 3.5 CSU,UC
- CISM 21 Client/Server Architecture, or 4.0
- CISP 21 Programming in Java 4.0 CSU,UC
- CISP 21 Programming in C++ 4.0 CSU,UC
- CISP 34 Advanced C++ Programming 4.0 CSU,UC

**Total Units 27.0**

### Programming In Visual Basic

**Computer Information Systems Department**

**Certificate 60709**

This certificate is intended to prepare students to work in Visual Basic which is used to develop graphical user interfaces and client/server applications.

**Requirements for the Certificate**

**Required courses:**
- CISB 11 Computer Information Systems 3.5 CSU,UC
- CSID 11 Database Management 4.0 CSU - Microcomputers
- CISM 11 Systems Analysis and Design 3.5 CSU,UC
- CISM 14 Computer Information Systems Seminar 4.0
- CISM 21 Client/Server Architecture 4.0
- CISP 11 Basic Programming 4.0 CSU,UC
- CISP 14 Advanced Basic Programming 4.0 CSU,UC

**Total Units 27.0**

### Radio Broadcasting: On the Air

**Commercial and Entertainment Arts**

**Certificate 60606**

This On-the-Air Radio Broadcasting Certificate is designed for students who are interested in working in the performance side of the industry. Students receive instruction in developing skills needed to work as disc jockeys, newscasters, voice-over artists and in other performance areas of the industry.

**Requirements for the Certificate**

**Required courses:**
- R-TV 01 Introduction to Broadcasting 3.0 CSU
- R-TV 02 Radio and Television Announcing 3.0 CSU or
- R-TV 02A On-Air Personality Development 3.0 - Spanish Market
- R-TV 05 Radio-TV Newswriting 3.0
- R-TV 09 Beginning Radio Production 3.0 CSU
- R-TV 10 Radio Management and Programming 3.0
- R-TV 11A Beginning Radio Production 3.0 CSU
- R-TV 11B Advanced Radio Production 3.0 CSU
- R-TV 15 Broadcast Business Practices 3.0
- R-TV 16 Broadcast Career Preparation 3.0
- R-TV 97A Radio/Entertainment Industry Internship 1.0
- R-TV 97B Radio/Entertainment Industry Internship - KSAK Radio 1.0
- R-TV 97C Radio/Entertainment Industry Internship - KSAK Radio 1.0

**Total Units 33.0 - 34.0**

### Radio Broadcasting: Behind the Scenes

**Commercial and Entertainment Arts**

**Certificate 60605**

This On-the-Air Radio Broadcasting Certificate is designed for students who are interested in working in the performance side of the industry. Students receive instruction in developing skills needed to work as disc jockeys, newscasters, voice-over artists and in other performance areas of the industry.

**Requirements for the Certificate**

**Required courses:**
- R-TV 01 Introduction to Broadcasting 3.0 CSU
- R-TV 02 Radio and Television Announcing 3.0 CSU or
- R-TV 02A On-Air Personality Development 3.0 - Spanish Market
- R-TV 05 Radio-TV Newswriting 3.0
- R-TV 11A Beginning Radio Production 3.0 CSU
- R-TV 11B Advanced Radio Production 3.0 CSU
- R-TV 15 Broadcast Business Practices 3.0
- R-TV 16 Broadcast Career Preparation 3.0
- R-TV 97A Radio/Entertainment Industry Internship 1.0
- R-TV 97B Radio/Entertainment Industry Internship - KSAK Radio 1.0
- R-TV 97C Radio/Entertainment Industry Internship - KSAK Radio 1.0

**Total Units 33.0 - 34.0**
Programs of Study Leading to a Certificate

**Real Estate**

Business Administration Department

Certificate 60512

Prior to applying to take the California Real Estate Salesperson License Exam the applicant must have completed Real Estate Principles (BUSR 50), Real Estate Practice (BUSR 52), and a third elective course in real estate. The certificate in real estate includes these three courses and three additional courses for a total of six of the eight classes needed to satisfy the educational requirements to take the California Real Estate Broker Exam.

**Requirements for the Certificate**

**Required courses:**

- BUSR 50 Real Estate Principles 3.0 CSU
- BUSR 51 Legal Aspects of Real Estate 3.0
- BUSR 52 Real Estate Practice 3.0
- BUSR 52D Real Estate Practice 3.0 Work Experience
- BUSR 53 Real Estate Finance 3.0
- BUSR 55 Real Estate Economics 3.0
- BUSR 57 Income Tax Aspects of Real Estate Investments 3.0

**PLUS**

- Select three (3) courses from:
  - BUSA 15 Business Law 3.0 CSU, UC
  - BUSR 76 Escrow Procedures I 3.0
  - BUSR 79 Real Estate Property Management 3.0

**Total Units** 18.5

**Real Estate Appraisal**

Business Administration Department

Certificate 60513

The certificate in Real Estate Appraisal meets all of the educational requirements for Appraiser Trainee, Licensed Appraiser, and depending on the choice of electives may meet the educational requirements for Certified Residential Appraiser.

**Requirements for the Certificate**

**Required courses:**

- BUSR 59 Real Estate Property Management 3.0
- BUSR 76 Escrow Procedures I 3.0

**Total Units** 18.5

**Sign Language/Interpreting**

Sign Language Department

Certificate 60801

The Mt. San Antonio College Interpreter Training Program is designed to prepare individuals for careers as Sign Language Interpreters. Interpreters are needed wherever communication happens between the hearing community and the Deaf and hard-of-hearing community. There are an endless number of settings in which this communication takes place. Interpreters are employed by school districts, cruise ship companies, corporations, government agencies, hospitals, colleges and universities, and a vast number of other organizations and private businesses.

**Program Preparation:** Preparation for the program includes fluency in American Sign Language (ASL) and the completion of ENGL 1A, American Sign Language 4, (or the equivalent skill) and English proficiency demonstrated by the completion of ENGL 1A.

**National Certification:** There are many specialties within the field of Sign Language Interpreting, but the focus of this program is on preparing the interpreter generalist. Although requiring some type of certification is becoming more common in California, there are still many job opportunities for the precertified interpreter. Completing the certificate in Sign Language/Interpreting does not make one a "Certified Interpreter"; however, graduates of this program are encouraged to apply for National Interpreting Certification (NIC) through the Registry of Interpreters for the Deaf (RID) at www.rid.org.

**Requirements for the Certificate**

**Required courses:**

- SIGN 105 American Sign Language 5 4.0
- SIGN 108 Fingerspelling 2.0
- SIGN 201 Deaf Perspectives 3.0
- SIGN 202 American Deaf Culture 3.0 CSU, UC
- SIGN 210 American Sign Language Structure 3.0 CSU, UC
- SIGN 220 Translation: American Sign Language/English 3.0 CSU
- SIGN 223 Principles of Interpreting 3.0
- SIGN 225 Ethical Decision Making for Interpreters 2.0
- SIGN 227 Cognitive Processing for Interpreters 4.0
- SIGN 231 Interpreting 4.0
- SIGN 232 Advanced Interpreting 4.0
- SIGN 239 Practicum 1.0

**PLUS**

- Select three (3) courses from:
  - SIGN 99 Special Projects in Sign Language/Interpreting 2.0
  - SIGN 238 Oral Transliteration 3.0
  - SIGN 240 Vocabulary Building for Interpreters 2.0
  - SIGN 250 Interpreting with Classifiers 1.5
  - SIGN 260 Video Interpreting 1.5
  - SL 2 Linked Service Learning 1.0 CSU

**Total Units** 40.0 - 43.0

**School Age Child - Specialization**

Child Development

Certificate 61314

The School Age Child Specialization Certificate (31-33 units) provides the holder with specialized skills for working with children of that age. This certificate meets or exceeds Title 5 Master Teacher - School Age Child Permit Level (with 16 units of general education).
### Telecommunications

**Computer Information Systems Department Certificate 60708**

This certificate program is intended to prepare students to work with microcomputer networks and communication systems.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
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<td>CSB 11</td>
<td>Computer Information Systems</td>
<td>3.5</td>
<td>CSU,UC</td>
<td>IS</td>
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<tr>
<td>CSBM 11</td>
<td>Systems Analysis and Design</td>
<td>4.0</td>
<td>CSU</td>
<td>IS</td>
</tr>
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<td>CSBM 21</td>
<td>Network Administration</td>
<td>3.5</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>CSN 11</td>
<td>Telecommunications/Networking Fundamentals</td>
<td>4.0</td>
<td>CSU</td>
<td>IS</td>
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<td>CSN 14</td>
<td>Advanced Telecommunications</td>
<td>4.0</td>
<td>CSU</td>
<td>IS</td>
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<tr>
<td>CSN 41</td>
<td>Novell Netware Systems Administration</td>
<td>4.0</td>
<td>CSU</td>
<td>IS</td>
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<td>CSN 24</td>
<td>Microsoft NT Network System Administration</td>
<td>4.0</td>
<td>CSU</td>
<td>IS</td>
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</tbody>
</table>

**Total Units**: 27.0

### Television Production

**Commercial and Entertainment Arts Certificate 60602**

Students will gain experience in film-style production, remote and studio production. This course of study qualifies the student for a Certificate in television production, and is designed to prepare a student for an entry-level job in the industry in a variety of areas. This includes not only skills used in production, but also preproduction, and editing.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-TV 01</td>
<td>Introduction to Broadcasting</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 15</td>
<td>Broadcast Business Practices</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 16</td>
<td>Broadcast Career Preparation</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 19A</td>
<td>Beginning Television Production</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 19B</td>
<td>Advanced Television Production</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 100B</td>
<td>Work Experience in Film and TV</td>
<td>2.0</td>
<td>CSU</td>
<td>U</td>
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</table>

**PLUS**

Select sixteen (12) units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-TV 18</td>
<td>Writing for Television/Film</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 20</td>
<td>Television News Production</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 21</td>
<td>Remote Television Production</td>
<td>3.5</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 22</td>
<td>Editing for Film and Television</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
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</table>

**Total Units**: 26.0

**Recommended Electives**:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIM 115</td>
<td>Storyboarding</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 26</td>
<td>Current Issues in Entertainment Law</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>THTR 17</td>
<td>Acting for Television</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
</tbody>
</table>

### Theatrical Costumer

**Theater Department Certificate 61001**

The Theatrical Costumer Certificate provides the holder with the skills needed for employment as assistants in costuming positions in the fields of theater, film, video, or historical recreation.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTD 15A</td>
<td>Drawing: Beginning</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>FASH 10</td>
<td>Clothing Fundamentals</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>FASH 17</td>
<td>Textiles</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>FASH 61</td>
<td>History of Costume and Fashion</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>THTR 9</td>
<td>Introduction to Theatre Arts</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 19</td>
<td>Theatrical Costuming</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
</tbody>
</table>

### Water Technology

**Air Conditioning, Water & Welding Technologies Certificate 60921**

This program is designed to train students who wish to: (1) seek employment in the water treatment industry, or (2) qualify for a specialized position within the water treatment industry. Material covered in the courses will be helpful to students who wish to prepare for Grade I, II, or III Water Treatment Operator certification examinations given by the State of California, Department of Health, and the AWWA Distribution Operation Certification. It also covers the responsibilities of water supply, State Health Department Title 17 Cross-Connections, and Title 22 Water Quality Standards.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTD 20</td>
<td>Design: Two Dimension</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 14</td>
<td>Stagecraft</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>THTR 15</td>
<td>Play Rehearsal and Performance</td>
<td>2.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 16</td>
<td>Theatrical Make-Up</td>
<td>2.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 18</td>
<td>Technical Theater Practicum</td>
<td>1.0</td>
<td>CSU,UC</td>
<td>U</td>
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</table>

**PLUS**

Select six (6) units from:

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTD 15A</td>
<td>Drawing: Beginning</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>FASH 10</td>
<td>Clothing Fundamentals</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>FASH 17</td>
<td>Textiles</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>FASH 61</td>
<td>History of Costume and Fashion</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>THTR 9</td>
<td>Introduction to Theatre Arts</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 19</td>
<td>Theatrical Costuming</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
</tbody>
</table>

**Total Units**: 24.0

### Tree Care and Maintenance

**Agricultural Sciences Department Certificate 60111**

This certificate program is designed to give students basic skills in the repair and maintenance of trees. All courses are applicable for degree requirements.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 01</td>
<td>Horticultural Science</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>AGOR 24</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>AGOR 30</td>
<td>Ornamental Plants</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>AGOR 50</td>
<td>Soil Science and Management</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>AGOR 51</td>
<td>Tractor and Landscape</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>AGOR 63</td>
<td>Landscape Irrigation - Design and Installation</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
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</tbody>
</table>

**PLUS**

Select twelve (12) units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
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<tbody>
<tr>
<td>R-TV 18</td>
<td>Writing for Television/Film</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 20</td>
<td>Television News Production</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 21</td>
<td>Remote Television Production</td>
<td>3.5</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 22</td>
<td>Editing for Film and Television</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
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</tbody>
</table>

**Total Units**: 26.0

**Recommended Electives**:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIM 115</td>
<td>Storyboarding</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>R-TV 26</td>
<td>Current Issues in Entertainment Law</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>THTR 17</td>
<td>Acting for Television</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
</tbody>
</table>

### Water Technology

**Air Conditioning, Water & Welding Technologies Certificate 60921**

This program is designed to prepare students for entry-level employment in the broad field of welding, including manufacturing construction, fabrication and repair. Through theoretical and hands-on skills coursework students prepare for industry licensing with an understanding of current guidelines and standards. Particular emphasis is placed on those competencies required for certification in structural steel welding. Course sequences can be modified to reflect industry experience or other individual needs.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTD 20</td>
<td>Design: Two Dimension</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 14</td>
<td>Stagecraft</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>THTR 15</td>
<td>Play Rehearsal and Performance</td>
<td>2.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 16</td>
<td>Theatrical Make-Up</td>
<td>2.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 18</td>
<td>Technical Theater Practicum</td>
<td>1.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
</tbody>
</table>

**Total Units**: 24.0

### Welder - Licensed

**Air Conditioning, Water & Welding Technologies Certificate 60930**

This program is designed to prepare students for entry-level employment in the broad field of welding, including manufacturing construction, fabrication and repair. Through theoretical and hands-on skills coursework students prepare for industry licensing with an understanding of current guidelines and standards. Particular emphasis is placed on those competencies required for certification in structural steel welding. Course sequences can be modified to reflect industry experience or other individual needs.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>School</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTD 20</td>
<td>Design: Two Dimension</td>
<td>3.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 14</td>
<td>Stagecraft</td>
<td>3.0</td>
<td>CSU</td>
<td>U</td>
</tr>
<tr>
<td>THTR 15</td>
<td>Play Rehearsal and Performance</td>
<td>2.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 16</td>
<td>Theatrical Make-Up</td>
<td>2.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
<tr>
<td>THTR 18</td>
<td>Technical Theater Practicum</td>
<td>1.0</td>
<td>CSU,UC</td>
<td>U</td>
</tr>
</tbody>
</table>

**Total Units**: 24.0

Section 7
Programs of Study Leading to a Certificate

Requirements for the Certificate

Welder - Gas Tungsten Arc Welding
Air Conditioning, Water & Welding Technologies
Certificate 60932
Prepares students for entry-level employment as a licensed welder with additional skills development and theory in gas tungsten ARC welding. Coursework prepares students for industry licensing with emphasis on competencies required for certification in aluminum, CRES, mild steel and selected exotic metals with specialty skills in gas tungsten ARC welding.

Requirements for the Certificate

Required courses:
- WELD 40 Introduction to Welding 2.0 CSU
- WELD 50 Oxyacetylene Welding 2.0
- WELD 51 Basic Electric Arc Welding 2.0
- WELD 53A Welding Metallurgy 3.0 CSU
- WELD 60 Print Reading and Computations for Welders 3.0
- WELD 70A Beginning Arc Welding 3.0
- WELD 70B Intermediate Arc Welding 3.0
- WELD 70C Certification for Welders 3.0
- WELD 80 Fabrication and Construction Welding 3.0
- WELD 81 Pipe and Tube Welding 3.0
- WELD 90A Gas Tungsten Arc Welding 3.0

Total Units 30.0

Note: Any higher level welding courses may be substituted for WELD 40.

Welder - Semiautomatic Arc Welding
Air Conditioning, Water & Welding Technologies
Certificate 60933
Prepares students for entry-level employment as a licensed welder with additional skills development and theory in semiautomatic ARC welding. Coursework prepares students for industry licensing with emphasis on competencies required for certification in structural steel welding and specialty skills in semiautomatic ARC welding.

Requirements for the Certificate

Required courses:
- WELD 40 Introduction to Welding 2.0 CSU
- WELD 50 Oxyacetylene Welding 2.0
- WELD 51 Basic Electric Arc Welding 2.0
- WELD 53A Welding Metallurgy 3.0 CSU
- WELD 60 Print Reading and Computations for Welders 3.0
- WELD 70A Beginning Arc Welding 3.0
- WELD 70B Intermediate Arc Welding 3.0
- WELD 70C Certification for Welders 3.0
- WELD 80 Fabrication and Construction Welding 3.0
- WELD 81 Pipe and Tube Welding 3.0
- WELD 90B Semiautomatic Arc Welding Process 3.0

Total Units 30.0

Note: Any higher level welding courses may be substituted for WELD 40.
The certificate program is designed for the student who is preparing for an entry-level management position in California's diverse economy. Upon completion of the Business: Management - Level I Certificate students may qualify for an entry-level management position in California's diverse economy.

Requirements for the Certificate

Required courses:
BUSB 20 Principles of Business 3.0 CSU,UC
BUSB 61 Business Organization and Management 3.0 CSU
BUSB 62 Human Resource Management 3.0
Total Units 9.0

Special Information:
Students receiving financial aid need to declare the Level III Certificate as their goal to meet Financial Aid requirements.
Programs of Study Leading to a Certificate

Business: Workplace Competencies
Business Administration Department
Certificate 60532
This certificate program is designed for the student thinking about joining the professional workforce or seeking current job advancement. It covers the most often listed requirements for employment and job advancement including professional communication, appearance and life management.
Requirements for the Certificate
Required courses:
BUSM 20 Principles of Business 3.0 CSU,UC
BUSM 66 Small Business Management 3.0 CSU
BUS 36 Principles of Marketing 3.0 CSU
Total Units 9.0

Children's Program Certificate:
General - Level I
Child Development
Certificate 61326
The Children's Program Certificate: General - Level I is designed for the student who desires general knowledge about child development and who has an interest or awareness of teaching young children. This certificate meets Title 22 education requirements for fully qualified teachers.

Requirements for the Certificate
Required courses:
CHLD 1 Child, Family and Community 3.0 CSU,UC
CHLD 5 Principles/Practices in Child Development Programs 3.0 CSU
CHLD 6 Survey of Child Development Curriculum 3.0 CSU
CHLD 10 Child Growth and Development - Honors 3.0 CSU,UC
CHLD 10H Child Growth and Development 3.0 CSU,UC
Total Units 12.0

CIS Professional Cert. in Database Mgmt. - Microcomputers
Computer Information Systems Department
Certificate 60715
This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to work and manage data using a PC-based Database Management System. The program covers the major topics of the Microsoft MDOUS certification exam for Access.
Requirements for the Certificate
Required courses:
CISD 11 Database Management 4.0 CSU
CISD 14 Advanced Database Management - Microcomputers 4.0 CSU
CISD 40 Database Design 2.0 CSU
Total Units 10.0

CIS Professional Cert. in Object-Oriented Design & Prog.
Computer Information Systems Department
Certificate 60723
This certificate will provide the basic knowledge for developing a model and creating a design for business application programs using object-oriented approach and UML.
Requirements for the Certificate
Required courses:
CISP 11 Basic Programming 4.0 CSU,UC
CISP 31 Programming in C++ 4.0 CSU,UC
CISP 21 Programming in Java 4.0 CSU,UC
Total Units 12.0

CIS Professional Cert. in Windows Operating System Admin.
Computer Information Systems Department
Certificate 60720
This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to develop skills to install, manage/administer, and troubleshoot Microsoft Windows workstations and server operating system. The courses in this certificate cover the major topics of industry standard certification exams.
Requirements for the Certificate
Required courses:
CIS 11 Windows Operating System 4.0 CSU
CISN 14 Microsoft NT Network System 4.0 CSU
Total Units 8.0

CIS Professional Cert. in C# Programming
Computer Information Systems Department
Certificate 60722
This certificate is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program prepares the student to develop applications using C# for Windows or Web based programs.
Requirements for the Certificate
Required courses:
CISD 21 SQL Server 4.0 CSU
CISP 41 Programming in C# 4.0 CSU
CISP 44 Advanced Programming in C# 4.0 CSU
Total Units 12.0

CIS Professional Certificate in LINUX
Computer Information Systems Department
Certificate 60706
This certificate is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to install, manage, and troubleshoot workstations, servers, and Local Area Networks using the Linux operating system. The certificate covers the major topics of an industry standard certification exam for Linux.
Requirements for the Certificate
Required courses:
CISN 31 LINUX Operating System 4.0 CSU
CISN 34 LINUX Networking and Security 4.0 CSU
CISN 35 Web Servers 4.0 CSU
Total Units 12.0

CIS Professional Certificate in Network Security
Computer Information Systems Department
Certificate 60721
This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program is aimed to help students develop skills to design, implement, and maintain secured networks. The courses examine Firewall and VPN in various environments and platforms, use network protocol analyzing technology as a security tool to protect the networks from attacks, and illustrate network vulnerabilities from a hacker's perspective. This program will prepare students to explain fundamental concepts of network security, identify network vulnerabilities and attacks, and use various protocol analyzers to detect network attack and troubleshoot network problems. Individual courses may assist students in preparing for related industry certification exams.
Requirements for the Certificate
Required courses:
CISN 31 Network Vulnerabilities and Countermeasures 4.0 CSU
CISN 23 Network Analysis and NIDS 4.0 CSU
CISN 25 Network Security and Firewalls 4.0 CSU
Total Units 12.0
This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will help the student understand the concepts and theories underlying service oriented architecture (SOA), XML technologies (DTD, XSD, XML, XQuery and XPath), and Web services technologies (UDDI, WSDL and SOAP).

Requirements for the Certificate

**Required courses:**
- CISW 41 XML Secure Programming 3.0
- CISW 49 Service Oriented Architecture 3.0

**Total Units:** 6.0

### CIS Professional Certificate in SQL

**Computer Information Systems Department Certificate 60730**

This certificate is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to view and update databases, create and maintain database objects, and develop programs to automate database functions.

Requirements for the Certificate

**Required courses:**
- CISD 21 SQL Server 4.0
- CISD 31 Database Management 4.0
- CISD 40 Database Design 2.0

**Total Units:** 10.0

### CIS Professional Certificate in C++ Programming

**Computer Information Systems Department Certificate 60714**

This curriculum is designed for returning CIS professionals, with several years of experience or current students who have completed several CIS courses. This program will prepare the student to write applications in C++ and Visual C++ and provide a basic understanding of Object-Oriented Design.

Requirements for the Certificate

**Required courses:**
- CISP 11 Basic Programming 4.0 CSU,UC
- CISP 21 Programming in Java 4.0 CSU,UC
- CISP 31 Programming in C++ 4.0 CSU,UC
- CISP 41 Novell Netware Systems Administration 4.0 CSU

**Total Units:** 8.0

### CIS Professional Certificate In Java Programming

**Computer Information Systems Department Certificate 60700**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to develop applications using Java and includes techniques in Object Oriented Programming, web-based applets, servlets, navigating databases, and JavaBeans.

Requirements for the Certificate

**Required courses:**
- CISD 31 Programming in Java 4.0 CSU,UC
- CISD 40 Database Design 2.0

**Total Units:** 12.0

### CIS Professional Certificate In Oracle Programming

**Computer Information Systems Department Certificate 60717**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to install, create, manage, administer, and troubleshoot an Oracle database. The program covers the major topics of an industry standard certification exam for Oracle.

Requirements for the Certificate

**Required courses:**
- CISD 31 Programming in Java 4.0 CSU,UC
- CISD 32 Oracle Forms and Reports 4.0
- CISD 33 Oracle Database Administration 4.0

**Total Units:** 12.0

### CIS Professional Certificate In Visual Basic Programming

**Computer Information Systems Department Certificate 60719**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will help the student understand the concepts and theories underlying service oriented architecture (SOA), XML technologies (DTD, XSD, XML, XQuery and XPath), and Web services technologies (UDDI, WSDL and SOAP). This program will prepare the student to develop applications using Visual Basic for Windows or Web based systems.

Requirements for the Certificate

**Required courses:**
- CISP 11 Basic Programming 4.0 CSU,UC
- CISP 14 Advanced Basic Programming 4.0 CSU,UC

**Total Units:** 8.0

### CIS Professional Certificate In JavaScript Programming

**Computer Information Systems Department Certificate 60713**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to develop applications using JavaScript and includes techniques in Object Oriented Programming, web-based applets, servlets, navigating databases, and JavaBeans.

Requirements for the Certificate

**Required courses:**
- CISW 31 Web Servers 4.0
- CISW 24 Advanced Web Programming 4.0

**Total Units:** 12.0

### CIS Professional Certificate In Web Programming

**Computer Information Systems Department Certificate 60718**

This curriculum is designed for returning CIS professionals with several years of experience or current students who have completed several CIS courses. This program will prepare the student to install, create, manage, administer, and troubleshoot an Oracle database. The program covers the major topics of an industry standard certification exam for Oracle.

Requirements for the Certificate

**Required courses:**
- CISD 31 Database Management 4.0
- CISD 32 Oracle Forms and Reports 4.0
- CISD 33 Oracle Database Administration 4.0

**Total Units:** 12.0

### CIS Professional Certificate In Telecommunications

**Computer Information Systems Department Certificate 60716**

This curriculum is designed to help students develop skills to administer and manage the heterogeneous corporate network. The courses examine and illustrate communication protocols with various industrial leading network operating systems. The main objective of the certificate is to integrate and enhance knowledge for network administration. However, individual courses may assist students in preparing for related certification exams.

Requirements for the Certificate

**Required courses:**
- CISN 11 Telecommunications/Networking Fundamentals 4.0 CSU
- CISN 24 Microsoft NT Network System Administration 4.0 CSU
- CISN 41 Novell Netware Systems Administration 4.0 CSU

**Total Units:** 8.0

### Coaching

**Physical Education Department Certificate 60804**

This certificate program is intended to prepare students for employment as high school (walk-on) coaches, but is appropriate for coaches at various levels.

Requirements for the Certificate

**Required courses:**
- PE 13 Sports Officiating 3.0 CSU,UC
Programs of Study Leading to a Certificate

**Culinary Arts - Level I**

*Consumer Science and Design Technologies Certificate 61334*

The Culinary Arts - Level I Certificate program will prepare students for food production job opportunities in the food service industry. The program emphasizes basic food preparation, commercial food production, and food safety and sanitation. Six units of elective courses allow the student to tailor the program to meet specific needs.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 52</td>
<td>Food Safety and Sanitation</td>
<td>1.5</td>
<td>CSU</td>
</tr>
<tr>
<td>HRM 54</td>
<td>Basic Cooking Techniques</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>HRM 91</td>
<td>Work Experience in Restaurant/Hospitality</td>
<td>1.0</td>
<td>CSU</td>
</tr>
<tr>
<td>NF 20</td>
<td>Principles of Foods With Lab</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>PLUS</td>
<td>Select six (6) units from:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 61</td>
<td>Menu Planning</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>HRM 62</td>
<td>Catering</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>NF 61</td>
<td>Creative Foods</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>NF 62</td>
<td>Meal Management</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>14.5</td>
<td></td>
</tr>
</tbody>
</table>

**Electronic Assembly and Fabrication**

*Electronics and Computer Technology Department Certificate 60929*

The Electronic Assembly and Fabrication Certificate is intended to prepare students to enter the electronics field as assembly and fabrication technicians. The program provides a series of courses to meet the needs of industry in assembly, soldering/de-soldering skills and fabrication for both thru-hole and surface mount devices (SMD). Included are skills for various types of cabling and connections.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 63</td>
<td>Electronic Assemblies Recertification</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>MATH 51</td>
<td>Elementary Algebra</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>ENGL 68</td>
<td>English - Writing</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>COMP 18</td>
<td>Data Entry</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>COMP 15</td>
<td>Microcomputer Applications</td>
<td>4.0</td>
<td>CSU,UC</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>11.0</td>
<td></td>
</tr>
</tbody>
</table>

**Electronics Systems Technology - Level I**

*Electronics and Computer Technology Department Certificate 60910*

This is a fast-track certificate program within the fields of information and electronic technology. These fields are growing at rapid rates. The program provides job skills in the areas of low voltage cable and wire installations used in the telephone industry, computer networks (business and home), home theater, home automation, and home security systems (integrated home systems). Typical job titles in these areas are data or cable technician, low-voltage wiring technician, home theatre installer, consumer electronics service technician and security system installer. The program prepares the student for the California State Contractors C-7 Low Voltage Systems license. The program encompasses a total of 27-29 units comprising two levels of certification. The level I certification (15-16 units) develops skills in electrical fundamentals, fabrication techniques, cabling and wiring standards for voice, video, and data, and basic computer skills in word processing, spreadsheets, database and the Internet. Level II certification (12-13 units) adds customer relations and advanced skills in the installation, calibration, setup, maintenance, and troubleshooting of home theater systems, home automation, and home security systems. Either a course on preparing for the C-7 license or the appropriate course is required for entry into the Paramedic Program or is required by most fire departments before the student may be hired as a firefighter.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 11</td>
<td>Technical Applications in Microcomputers</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ELEC 50</td>
<td>Electrical Fundamentals for Cable Installations</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>ELEC 63</td>
<td>Electronic Assemblies</td>
<td>2.0</td>
<td>CSU</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>15.0</td>
<td>- 16.0</td>
</tr>
</tbody>
</table>

**Emergency Medical Technician - Level I**

*Medical Services Department Certificate 61212*

Approved by the Los Angeles County and State Departments of Health. Emphasizes the development of skills to recognize symptoms of illnesses and injuries as well as the proper procedures of pre-hospital emergency care. Awards an EMT-I Course Completion Certificate necessary for many jobs in emergency care and is prerequisite for entry into a Paramedic program or most fire department jobs.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 62</td>
<td>Advanced Surface Mount Assembly and Rework</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>EST 50</td>
<td>Electrical Fundamentals for Cable Installations</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>12.0</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Electives:**

- ELEC 63 Electronic Assemblies Recertification

**Application Requirements and Selection Procedures**

**Application Requirements:**

- a) Applicant must be 18 years of age upon entrance into the course.
- b) High school graduate or equivalent.
- c) File a College application and be accepted as a student at Mt. San Antonio College.
- d) A physical examination, proof of certain immunizations, current certification in CPR, and a criminal background check are required of all students prior to entrance into the program. Forms and information will be provided upon entry into the course.

**Selection Procedure:**

The course is open to all students who meet the application requirements. All Applicants are required to meet the Essential Functions in the Emergency Medical Technician Program.
Physical Demands:
- Perform prolonged, extensive, or considerable standing/walking, lifting positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability to extremely heavy effort (lift and carry at least 125 pounds)
- Perform considerable reaching, stooping, bending, kneeling, and crouching

Sensory Demands:
- Color vision: ability to distinguish and identify colors (may be corrected with adaptive devices)
- Distance vision: ability to see clearly 20 feet or more
- Depth perception: ability to judge distance and space relationships
- Near vision: ability to see clearly 20 inches or less
- Hearing: able to recognize a full range of tones

Working Environment:
- May be exposed to infectious and contagious diseases
- May be exposed to blood borne diseases
- Exposed to hazardous agents, body fluids and wastes
- Exposed to odorous chemicals and specimens
- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end of life issues
- Exposure to products containing latex

English Language Skills:
Although proficiency in English is not a criteria for admission into the nursing program, students are encouraged to be able to speak, write and read English to complete classes successfully and to ensure safety for themselves and for others.

Programs of Study Leading to a Certificate

Fashion Design - Computer-Aided Certificate 61329
The Fashion Design - Computer-Aided certificate builds upon basic skills and provides students with intermediate technical and technological skills in fashion design and patternmaking. With a diversified skill base that includes CAD technology, students will be better prepared for above entry-level positions and/or advancement to new career opportunities.

Requirements for the Certificate
Required courses:
- FASH 20 Illustration for Fashion and Costume Design 3.0
- FASH 21 Patternmaking I 3.0 CSU
- FASH 24 Fashion Patternmaking by Computer 3.0
- FASH 25 Fashion Computer-Assisted Drawing 3.0
- FASH 26 Fashion Computer-Assisted Design 2.0

Total Units 14.0

Fashion Design - Level I Certificate 61307
The Fashion Design: Level I Certificate is designed to introduce the student to the employment opportunities available in both fashion design and costume design. Upon completion of the Fashion Design: Level I Certificate, students may qualify for an entry-level design and pattern making positions in Southern California's apparel industry and the entertainment industry that support the largest number of employees and contributes significantly to the economy of the region.

Requirements for the Certificate
Required courses:
- FASH 8 Introduction to Fashion and Costume Design 3.0 CSU
- FASH 10 Clothing Construction I 3.0 CSU
- FASH 12 Clothing Construction II 3.0 CSU
- FASH 15 Fashion Strategies 3.0 CSU
- FASH 20 Illustration for Fashion and Costume Design 3.0
- FASH 21 Patternmaking I 3.0 CSU
- FASH 22 Fashion Design By Draping 3.0
- FASH 23 Patternmaking II 3.0

Total Units 16.0

Fashion Merchandising - Level I Certificate 61308
The Fashion Merchandising Level I Certificate prepares the holder for entry-level positions in a variety of retail merchandising, manufacturing, and promotion businesses.

Requirements for the Certificate
Required courses:
- FASH 8 Introduction to Fashion 3.0 CSU
- FASH 10 Clothing Construction I 3.0 CSU
- FASH 15 Fashion Strategies 3.0 CSU
- FASH 17 Textiles 3.0 CSU, UC
- FASH 30 Fashion Design 3.0
- Product Development I 3.0

Total Units 15.0

Fire Administration Certificate 62130
The Fire Administration Certificate prepares public agency firefighters or private fire personnel for career advancement and provides personal development. This certificate prepares students for career advancement as supervisors and managers. The student will develop leadership, management, and supervisory competencies including leadership philosophy, ethics, diversity, and the difference between managing and leading people. Content focuses on job skills in organizational management, human resources, risk management, diversity, interpersonal skills, personnel and equipment, fire ground tactics and strategy, and investigation techniques. This certificate meets the requirements of the California State Board of Fire Services Certified Fire Officer Program.

Requirements for the Certificate
Required courses:
- FIRE 7 Fire Fighting Tactics and Strategy 3.0 CSU
- FIRE 8 Fire Company Organization and Management 3.0 CSU
- FIRE 10 Arson and Fire Investigation 3.0 CSU
- FIRE 20 Fire Instructor 1A 2.0
- FIRE 21 Fire Instructor 1B 2.0
- FIRE 30 Fire Management 1 2.0
- FIRE 50 Fire Command 1A 2.0

Total Units 17.0

Fitness Specialist/Personal Trainer Certificate 60808
The Fitness Specialist/Personal Trainer Certificate prepares students for careers as personal trainers, health/fitness professionals in corporate fitness facilities, wellness centers and public/private health clubs. The Fitness Specialist/Personal Trainer Certificate curriculum is designed to prepare students who wish to take exams offered by the American Council on Exercise (ACE), the American College of Sports Medicine (ACSM) and other nationally recognized organizations. Technical skills necessary for implementation of a safe, effective and motivational physical fitness program are presented.

Requirements for the Certificate
Required courses:
- NF 10 Nutrition for Personal Health and Wellness 3.0 CSU
- PE 15 Administration of Fitness Programs 2.0
## Programs of Study Leading to a Certificate

### Foster Care
**Certificate 61317**

This certificate requires the completion of twelve (12) units.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 1</td>
<td>Child and Family Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 10H</td>
<td>Child Growth and Development - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 15</td>
<td>Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 68</td>
<td>Children With Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 95</td>
<td>Issues in Foster Parenting</td>
<td>1.0</td>
</tr>
<tr>
<td>CHLD 96</td>
<td>Discipline and Adjustment</td>
<td>1.0</td>
</tr>
<tr>
<td>CHLD 97</td>
<td>Independent Living</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>Through Foster Care</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>12.0</strong></td>
</tr>
</tbody>
</table>

### Gallery Design/Operation and Art Profession
**Fine Arts Certificate 61020**

This certificate is designed to provide students with the necessary theoretical and practical knowledge and skills to display an esthetically and conceptually effective art exhibition. Students will acquire the knowledge of various/diverse artistic media and develop a career-oriented artistic perspective.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTG 20</td>
<td>Intro Exhibition and Professional Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTG 21A</td>
<td>Introduction to Exhibition Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTG 21B</td>
<td>Intermediate Exhibition Production</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTG 22A</td>
<td>Exhibition Design and Art Gallery Operation Work Experience</td>
<td>1.0</td>
</tr>
<tr>
<td>PLUS</td>
<td>Select one (1) course from:</td>
<td></td>
</tr>
<tr>
<td>COMP 60</td>
<td>Desktop Publishing</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 62</td>
<td>Desktop Publishing</td>
<td>4.0</td>
</tr>
<tr>
<td>AHIS 5</td>
<td>History of Western Art: Renaissance Through Modern</td>
<td>3.0</td>
</tr>
<tr>
<td>AHIS 6</td>
<td>History of Modern Art</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>17.0</strong></td>
</tr>
</tbody>
</table>

### Geographical Information Systems
**Certificate 62200**

The certificate program in Geographic Information Systems provides students in various disciplines the opportunity to develop expertise in the creation, manipulation, analysis, and display of geographic information. This exciting technology has applications in many fields including environmental assessment, analysis of natural hazards, site analysis for business and industry, criminal justice, real estate, location analysis, resource management, land use planning, and global changes and systems modeling.

This program was developed with two intended groups in mind: 1. Currently enrolled students who wish to focus their training and skills for a career in GIS 2. Currently employed persons who need or wish to enhance their training and skills for a career in GIS. Currently employed persons who need or wish to enhance their training and skills for a career in GIS 3. Currently employed persons who need or wish to enhance their training and skills for a career in GIS.

The program starts with a set of basic courses in geographic information technology and map reading.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 10</td>
<td>Introduction to Geographical Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOD 11</td>
<td>Intermediate GIS</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>9.0</strong></td>
</tr>
</tbody>
</table>

### Hotel Management
**Level I Certificate 61330**

This certificate prepares the holder to enter the food service field as a skilled food service worker in either food preparation or service.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 51</td>
<td>Introduction to Hospitality</td>
<td>3.0</td>
</tr>
<tr>
<td>HRM 52</td>
<td>Food Safety and Sanitation</td>
<td>1.5</td>
</tr>
<tr>
<td>HRM 53</td>
<td>Dining Room Service</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>7.5</strong></td>
</tr>
</tbody>
</table>

### Hospitality: Food Services
**Certificate 61320**

This certificate prepares the holder to enter the food service field as a skilled food service worker in either food preparation or service.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 51</td>
<td>Introduction to Hospitality</td>
<td>3.0</td>
</tr>
<tr>
<td>HRM 52</td>
<td>Food Safety and Sanitation</td>
<td>1.5</td>
</tr>
<tr>
<td>HRM 53</td>
<td>Dining Room Service</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>10.0</strong></td>
</tr>
</tbody>
</table>

### Information and Operating Systems Security
**Certificate 60731**

This certificate will provide the fundamental knowledge needed to analyze the risk to one’s network and systems and the steps necessary in order to select and deploy the appropriate countermeasures to reduce the computer’s exposure to network threats.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 11</td>
<td>Practical Computer Security</td>
<td>2.0</td>
</tr>
<tr>
<td>CISS 13</td>
<td>Principles of Information Systems Security</td>
<td>4.0</td>
</tr>
<tr>
<td>CISS 15</td>
<td>Operating Systems Security</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>10.0</strong></td>
</tr>
</tbody>
</table>

### Introduction to Computer Information Technology
**Certificate 60712**

This program is designed as a foundational introduction to the computer and informational technology environment. This program will introduce the student to computer concepts, microcomputer applications, and computer programming, and the Internet.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISB 11</td>
<td>Computer Information Systems</td>
<td>3.5</td>
</tr>
<tr>
<td>CISW 11</td>
<td>The Internet</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 12</td>
<td>Office Computer Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>CISS 15</td>
<td>Microcomputer Applications</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>11.5</strong></td>
</tr>
</tbody>
</table>
LVN 30-Unit Option  
- Career Mobility Track  
Nursing Department  
Certificate 61202

In keeping with Section 1429 of the Board of Registered Nursing Rules and Regulations, completion of this certificate program entitles the student to apply for examination for licensure as a Licensed Vocational Nurse in the State of California. This option is specifically designed for California licensees. Other states do not have this provision in their laws; therefore, endorsement for licensure may not be granted.

A certificate documenting completion is awarded at the end of the course of study. The student who elects to complete the 30-Unit Option track is not a graduate of the Associate in Science Degree Nursing Program at Mt. San Antonio College. Individuals who complete this track are not eligible to return to the college at a later date to complete a degree in nursing. LVN applicants must declare their educational goal at the time of application (30-Unit or Associate Degree). This decision is not subject to change at a later date.

Prerequisite Courses:
1. Human Anatomy, including a laboratory component, a minimum of four semester units.
2. Human Physiology, including a laboratory component, a minimum of four semester units.
3. Microbiology, including a laboratory component, a minimum of four semester units.

Non-course requirements:
1. An overall grade point average of 2.5 for the Human Anatomy, Human Physiology, and Microbiology prerequisite courses with no grade less than a "C" for each course and no more than one repetition of any one of these courses.
2. A cumulative grade point average (GPA) of 2.5 for all college coursework completed.
3. Eligibility for Math 51
4. High school graduation or GED or academic degree from an accredited college/university in the United States.
5. Possess a California Licensed Vocational Nurse license.
6. Criminal background check and drug screening must be completed prior to any patient contact.
7. A physical examination, including specific immunizations is required of candidates prior to the beginning of nursing classes.
8. Current Level C-Provider CPR certification

9. Nursing 70 Role Transition must be completed with a credit grade prior to entrance into the program. (NURS 70, Role Transition - Due to the clinical component of NURS 70, applicants must submit their names to the Nursing Office for approval prior to enrollment in this course. Applicants must have completed all prerequisite courses prior to taking NURS 70. Applicants must provide proof of current Vocational Nurse License, physical, CPR card, Background Check, and drug testing prior to the start of class.)

Requirements for the Certificate
Required courses:
NURS 5  Psychiatric Nursing  3.0 CSU
NURS 8  Medical-Surgical Nursing: Circulation and Oxygenation  5.0 CSU
NURS 9  Leadership in Nursing  1.0 CSU
NURS 10  Medical-Surgical Nursing: Integration/Regulation  4.0 CSU
NURS 11  Preceptorship in Nursing  2.0 CSU
Total Units 15.0

PSYC 1A must be completed prior to entrance into NURS 5, Psychiatric Nursing.

Selection Process:
Beginning Fall 2006, students applying for admission to the Nursing Program will be required to see either a counselor or educational advisor to verify their eligibility to enter the Nursing program.

Procedure:
Students must complete all course prerequisites prior to requesting an appointment for certifying readiness to enter into the Nursing program. Once eligibility has been established, students will enter on a first come first served basis. The eligibility appointment:

a) Once a student has completed all course prerequisites, the student will then apply to the Nursing Department on an appointment basis.

b) Students who have completed coursework at other colleges must bring the following information to their eligibility appointment:

- Official transcripts of all college coursework completed at all colleges;
- If the prerequisite courses were completed at another college, a course description and a copy of the course syllabus;

- Students completing college coursework outside of the United States will need to have their transcripts evaluated by an approved international transcript evaluation agency and must bring the final evaluation to their appointment (students may be able to obtain a list of agencies from the Admissions Office).

- Due to specific college deadlines for International Student applications, please inform the Counselor/Educational Advisor that this applies to you.

- All students will need to bring official proof of high school graduation, GED, or college graduation from an accredited institution in the United States. Students should also be aware that once they have been admitted to the Nursing program and before beginning the clinical portion of the program, they will need to be able to pass both a criminal background check, including a screening by the Office of Inspector General for welfare or Social Security fraud, as well as testing negative for drug use.

- ALL APPLICANTS ARE REQUIRED TO MEET THE ESSENTIAL FUNCTIONS FOR SUCCESS IN THE NURSING PROGRAM.

Physical Demands:
- Perform prolonged, extensive, or considerable standing/walking, lifting positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability for extremely heavy effort (lift/carry 50 lbs. or more)
- Perform considerable reaching, stooping, bending, kneeling, and crouching.

Sensory Demands:
- Color vision: ability to distinguish and identify colors (may be corrected with adaptive devices)
- Distance vision: ability to see clearly 20 feet or more
- Depth perception: ability to judge distance and space relationships
- Near vision: ability to see clearly 20 inches or less
- Hearing: able to recognize a full range of tones

Working Environment:
- May be exposed to infectious and contagious disease, without prior notification
- Regularly exposed to the risk of blood borne diseases
- Exposed to hazardous agents, body fluids and wastes
- Exposed to odorous chemicals and specimens
- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end of life issues
- Exposure to products containing latex

English Language Skills:
Although proficiency in English is not a criteria for admission into the nursing program, students are encouraged to be able to speak, write and read English to complete classes successfully and to ensure safety for themselves and for others.

Certificate 60956

This certificate provides a foundation of basic skills for employment in a variety of entry-level manufacturing positions.

Requirements for the Certificate
Required courses:

MFG 11  Manual and CNC  2.0 CSU
MFG 12  Advanced Manufacturing  2.0 CSU
MFG 58  Blueprint Reading  2.0 CSU
MFG 70  Technical Mathematics - Manufacturing Applications  2.0 CSU
MFG 85  Manual CNC (Computerized Numerical Control) Operations  2.0 CSU

PLUS
Select one (1) course from:

FAB 38  ShowCam I  2.0 CSU
FAB 39  SurfCAM I  2.0 CSU

Total Units 12.0
## Programs of Study Leading to a Certificate

### MasterCAM
**Aircraft Maintenance Tech & Manufacturing Dept.**

**Certificate 60927**

This certificate provides a strong background in MasterCAM 2-D, 3-D, and Solids packages along with the necessary machine shop theory and practice to input sound functional data into the CAD/CAM system.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG 11</td>
<td>2.0</td>
</tr>
<tr>
<td>MFG 30</td>
<td>2.0</td>
</tr>
<tr>
<td>MFG 38</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Total Units:** 6.0

### Nutrition Program Assistant - Level I

**Consumer Science and Design Technologies Certificate 61331**

This certificate prepares students to work for community agencies and programs as nutrition assistants.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 52</td>
<td>1.5</td>
</tr>
<tr>
<td>NF 20</td>
<td>3.0</td>
</tr>
<tr>
<td>NF 25</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units:** 10.5

### Nutrition Program Assistant - Level II: Child Program Emphasis

**Consumer Science and Design Technologies Certificate 61335**

This certificate prepares students to work for community agencies such as the Federal Supplemental Nutrition Program for Women, Infants and Children (WIC), Head Start, and School Food Service as nutrition assistants. Coursework is designed to provide basic skills and knowledge necessary for entry-level positions in nutrition programs that serve children.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 52</td>
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<tr>
<td>NF 20</td>
<td>3.0</td>
</tr>
<tr>
<td>NF 25</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units:** 17.5

### Nutrition Program Assistant - Level II: Weight Management Program Emphasis

**Child Development Certificate 61336**

This certificate prepares students to work as nutrition assistants in the public or private sector. Coursework is designed to provide the basic skills and knowledge necessary for entry-level positions in a variety of businesses, agencies and programs that focus on weight management.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 52</td>
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<tr>
<td>NF 20</td>
<td>3.0</td>
</tr>
<tr>
<td>NF 25</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units:** 16.5

### Parametric Solid Modeling

**Aircraft Maintenance Tech & Manufacturing Dept. Certificate 60923**

With the strong relationship between AutoCAD and MasterCAM, this certificate prepares students to work for community agencies such as the Federal Supplemental Nutrition Program (WIC), Head Start, and School Food Service as nutrition assistants. Coursework is designed to provide basic skills and knowledge necessary for entry-level positions in the public or private sector.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 52</td>
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<tr>
<td>NF 20</td>
<td>3.0</td>
</tr>
<tr>
<td>NF 25</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units:** 9.0

### SurfCAM

**Aircraft Maintenance Tech & Manufacturing Dept. Certificate 60925**

This certificate is a direct path for manufacturing students to work as surfacing system operators of Computerized Numerical Control (CNC) machines, and prepares them for the workplace in a variety of manufacturing and design environments.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG 05</td>
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<tr>
<td>MFG 19</td>
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<tr>
<td>MFG 25</td>
<td>2.0</td>
</tr>
<tr>
<td>MFG 27</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Total Units:** 8.0

### Welding

**Air Conditioning, Water & Welding Technologies Certificate 60919**

This program is designed to prepare the student for employment in the field of welding and (1) leads to occupations in manufacturing and repair; and (2) helps prepare the student for positions in supervision.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>WELD 40</td>
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<tr>
<td>WELD 70A</td>
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</tbody>
</table>

**Total Units:** 8.0

Note: Any higher level welding courses may be substituted for WELD 70A.

**Recommended Electives:**

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<thead>
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<tbody>
<tr>
<td>MFG 70</td>
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**Total Units:** 2.0

**Certificate 60919**

This program is designed to prepare the student for employment in the field of welding and (1) leads to occupations in manufacturing and repair; and (2) helps prepare the student for positions in supervision.

Courses in the welding curriculum prepare students for welding certificates. The College is acting as a testing agency for the City of Los Angeles, and is authorized to administer the performance test for the Structural Welding certificate. There is a $60 charge for non-students to take this test. Topics of the written portion of the test which is administered by the City are reviewed in various welding courses offered by the College.

**Requirements for the Certificate**

<table>
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<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 40</td>
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</tr>
<tr>
<td>WELD 70A</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units:** 8.0

**Certificate 60919**

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**Requirements for the Certificate**

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<tr>
<td>WELD 40</td>
<td>2.0</td>
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<td>WELD 70A</td>
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</tr>
</tbody>
</table>

**Total Units:** 8.0

**Certificate 60919**

This program is designed to prepare the student for employment in the field of welding and (1) leads to occupations in manufacturing and repair; and (2) helps prepare the student for positions in supervision.

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**Requirements for the Certificate**

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<tbody>
<tr>
<td>WELD 40</td>
<td>2.0</td>
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<tr>
<td>WELD 70A</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units:** 8.0
Section 8
Programs of Study Leading to an Associate in Arts Degree or an Associate in Science Degree
Programs Leading to an Associates Degree

Programs of Study Leading To an Associate Degree

Mt. San Antonio College offers both Associate of Science (A.S.) and Associate of Arts (A.A.) degrees. In general, the Associate of Science degrees are two-year occupational degrees that prepare students for a variety of career and technical fields. The Associate of Arts degrees, while not intended specifically for transfer, are two-year degrees in Liberal Arts and Sciences that provide for broad exploration of a specific area of emphasis. In many cases and with appropriate academic advising, students obtaining the Associate of Arts degree will find that they have a solid foundation for further postsecondary study should they wish to transfer at a later date.

General Requirements for an Associate Degree

Application for Graduation

The Application for Graduation is the student’s notification to Admissions and Records that he or she has completed all requirements and would like to receive a degree. The Application for Graduation form is available in the Admissions and Records office or online at www.mtsac.edu/students/admissions/gradp.html. Students should meet with a Counselor to discuss their Education Plan prior to submitting the Application for Graduation.

All students intending to receive a degree must file an Application for Graduation with the Admissions and Records office and have on file all required documents and official transcripts. The deadlines dates for submitting the Application for Graduation are as follows:

Fall: deadline to apply for fall graduation is the end of the ninth week.
Winter: deadline to apply for winter graduation is the end of the ninth week of the fall semester.
Spring: deadline to apply for spring graduation is the end of the ninth week.
Summer: deadline to apply for summer graduation is the end of the ninth week of the spring semester.

Students should check the Schedule of Classes in the Key Dates to Remember section for specific deadline dates for any given semester. Applications received after the deadline will be processed with the next graduation cycle. Students may apply for graduation one semester prior to completing all required coursework. Once the degree has been conferred, the degree will be posted to the student’s academic record and will appear on the transcript. Students will also receive their diplomas in the mail thereafter. If a student is denied graduation, he or she will be informed in writing.

Multiple Degrees

The Associate in Science degree shall be awarded to those graduates who majored in one of the occupational programs at Mt. San Antonio College. Students may be awarded both an Associate in Science degree and an Associate in Arts degree with the 60 units required for an Associate degree if they have met the requirements for both within the 60 units or earned credit. Each additional degree requires 18 units of course work beyond the 60 units required for the first degree(s), and must include the satisfactory completion of all the required courses in the additional major. Students awarded additional degrees must meet or complete the current general education requirements in effect at the time of re-entry.

Residency Requirement

The Residency Requirement for Mt. San Antonio College can be met in either of two ways: (1) twelve [12] units in residence and enrollment at Mt. San Antonio College in the last semester or (2) forty-five [45] units in residence, if the last semester is not at Mt. San Antonio College.

Multiple Degrees

Students may be awarded both an Associate in Science degree and an Associate in Arts degree with the 60 units required for an Associate degree if they have met the requirements for both within the 60 units or earned credit. Each additional degree requires 18 units of course work beyond the 60 units required for the first degree(s), and must include the satisfactory completion of all the required courses in the additional major. Students awarded additional degrees must meet or complete the current general education requirements in effect at the time of re-entry.

General Education Requirements

General Education Requirements: At least 24 units are required which shall include courses in each of the General Education areas, A through F (see pages 66-67). All courses must be completed with a grade of "C" or better.

Physical Well-Being Requirement: Complete at least one of the physical education activity courses with the following prefixes: DNCE, PE-A, PE-F, PE-I, PE-L, PE-S, PE-X with a grade of "C" or better or "CR".

Reading Competency: This requirement is met by completing one of the following with a grade of "C" or better:

- READ 90 Preparing for College Reading
- AMLA 3JR American Language Advanced Reading
- Obtaining placement into READ 100 on initial Reading Placement exam
- Obtaining a satisfactory score on the Reading Competency Test.

Math Competency: This requirement is met by completing one of the following with a grade of "C" or better:

1. Math 71 Intermediate Algebra, or
   Math 71B Intermediate Algebra - Second Half
   or
2. Completing a more advanced college level mathematics course.
   or
3. Obtaining a satisfactory score on the Intermediate Algebra Competency Examination.

GPA Requirement: A Mt. San Antonio College “degree” total grade point average, and “all college” total grade point average of 2.0.

Residency Requirement: The residency requirement for Mt. San Antonio College can be met in either of two ways:

1. 12 units in residence and enrollment in last semester, or
2. 45 units in residence if the last semester is not at Mt. San Antonio College.

Additional Requirements for the Associate in Science Degree

Students must complete all required courses in an approved occupational major with a minimum grade of "C" in all courses. See pages 69-95 for listings of the Associate in Science degree majors.

Additional Requirements for the Associate in Arts Degree

Students must complete a pattern of 18 or more units from the courses identified within a specific area of emphasis with a minimum grade of "C" in all courses. See pages 96-100 for listings of the Associate in Arts in Liberal Arts & Sciences areas of emphasis.
GENERAL EDUCATION REQUIREMENTS

Philosophy Statement

General education is the distinguishing feature of higher education. It is a broadly-based core of humanistic knowledge and abilities, the acquisition of which is the distinctive characteristic of the educated person. General education courses emphasize the ability to reason, to examine issues from different perspectives, to challenge authority, and to communicate ideas logically and confidently. They instill open-mindedness, respect for differences among people, and knowledge of self. By exposing students to different fields of study, general education courses provide an understanding of the human condition and of human accomplishments and encourage a lifelong interest in learning. Together with other Mt. San Antonio College degree requirements, the general education component of the associate degree prepares students to:

1. Transfer to and function successfully in a baccalaureate degree-granting institution;
2. Enter the work force as a competent, productive citizen;
3. Live a richer, more rewarding life.

General education courses are not primarily skills-based, nor are they limited to, or more appropriate for, majors in a specialized field of study. Courses that fulfill general education requirements must:

1. Require post-secondary level skills in reading, writing, quantitative reasoning, and critical thinking.
2. Improve students’ abilities to:
   - Communicate oral and written ideas effectively;
   - Define problems, design solutions, critically analyze results;
   - Use available media to access and retrieve reliable information for data gathering and research;
   - Work effectively, both cooperatively and independently;
   - Develop and question personal and societal values, make informed choices, and accept responsibility for their decisions;
   - Function as active, responsible, ethical citizens;
   - Acquire the curiosity and skills essential for lifelong learning.
3. Impart understanding, knowledge, and appreciation of:
   - Our shared scientific, technological, historical, and artistic heritage, including the contributions of women, ethnic minorities, and non-Western cultures;
   - The earth’s ecosystem, including the processes that formed it and the strategies that are necessary for its maintenance;
   - Human social, political, and economic institutions and behavior, including their interrelationships;
   - The psychological, social, and physiological dimensions of men and women as individuals and as members of society.

Courses that fulfill general education requirements must fall into one of the content categories listed below:

A. Communication and Critical Thinking
   These courses emphasize both the content and form of communication. They teach students the relationship of language to logic, as well as how to analyze, criticize, and advocate ideas; to reason deductively and inductively; and to reach sound conclusions. Courses fulfilling this requirement:
   - Impart understanding of the psychological and social significance of communication;
   - Illustrate how communication operates in various situations;
   - Focus on communication from the rhetorical perspective: reasoning, advocacy, organization, accuracy, the discovery, critical evaluation, and reporting of information; reading, listening, speaking, and writing effectively;
   - Provide active participation and practice in written and oral communication.

B. Science and Mathematics
   These courses impart knowledge about living and non-living systems, and mathematical concepts and quantitative reasoning with applications. Courses fulfilling this requirement:
   - Impart an understanding of the interrelationship between creative art, the humanities, and the self;
   - Provide exposure to both Western and non-Western cultures;
   - May include a foreign language course that contains a cultural component as opposed to a course that focuses solely on skills acquisition.

C. Humanities
   These courses cultivate intellect, imagination, sensibility and sensitivity. They encourage students to respond subjectively as well as objectively and to develop a sense of the integrity of emotional and intellectual responses. Courses fulfilling this requirement:
   - Study great works of the human imagination;
   - Increase awareness and appreciation of the traditional humanistic disciplines such as art, dance, drama, literature, and music;
   - Impart an understanding of the interrelationship between creative art, the humanities, and the self;
   - Provide exposure to both Western and non-Western cultures;
   - May include a foreign language course that contains a cultural component as opposed to a course that focuses solely on skills acquisition.

D. Social Sciences
   These courses explore, at the micro and macro-level, the social, political, and economic institutions that underpin society. Courses fulfilling these requirements:
   - Promote understanding and appreciation of social, political, and economic institutions;
   - Examine the relationship between these institutions and human behavior;
   - Study important political, economic, and sociological issues, human behavior, and social institutions.

E. Lifelong Understanding and Self-Development
   These courses facilitate an understanding of human beings as integrated physiological, social and psychological organisms. Courses fulfilling this requirement:
   - Provide selective consideration of human behavior, sexuality, nutrition, health, stress, implications of death and dying, and the relationship of people to the social and physical environment.

Adapted from CSU Executive Order 595 and Title 5 Section 40405.1
### Programs Leading to an Associates Degree

#### GENERAL EDUCATION REQUIREMENTS FOR 2008-2009

| AREA A: Communication in the English Language (6 units): |  |
| Select two [2] courses from the following: |  |
| ENGL 1A Freshman Composition, or |  |
| ENGL 1AH Freshman Composition – Honors and |  |
| SPCH 1A Public Speaking, or |  |
| SPCH 1AH Public Speaking – Honors |  |

| AREA B: The Physical Universe and Life (3 units): |  |
| Select one [1] course from the Physical Sciences or Life Sciences: |  |
| PHYSIC 7 Physical Science |  |
| OCEA 10H Introduction to Oceanography – Honors |  |
| CHEM 50H General Chemistry I – Honors |  |
| CHEM 50 General Chemistry I |  |
| CHEM 40 Introduction to General Chemistry |  |
| CHEM 20 Introductory Organic and Biochemistry |  |
| GEOG 1L Physical Geography Laboratory |  |
| GEOL 8 Earth Science |  |
| GEOL 7 Geology of California |  |
| GEOG LH Physical Geography Laboratory – Honors |  |
| GEOG 1H Elements of Physical Geography |  |
| GEOG 1L Physical Geography Laboratory |  |
| GEOL 9 Environmental Geology |  |
| GEOL 10 Natural Disasters |  |
| GEOL 13 Evolution of the Earth |  |
| METO 3 Weather and the Atmospheric Environment |  |
| METO 3L Weather and the Atmospheric Environment Laboratory |  |
| OCEA 10 Introduction to Oceanography |  |
| OCEA 10H Introduction to Oceanography – Honors |  |
| PHSC 7 Physical Science |  |

| AREA C: Arts and Humanities (6 units): |  |
| ARTS |  |
| ARTS AHS 1 Understanding the Visual Arts, or ARTB 1 Understanding the Visual Arts |  |
| ARTS AHS 1H Understanding the Visual Arts – Honors |  |
| ARTS AHS 2 Topics in Visual Art and Culture – Honors |  |
| ARTS AHS 3 History of Women and Gender in Art |  |
| ARTS AHS 3H History of Women and Gender in Art – Honors |  |
| ARTS AHS 4 History of Western Art: Prehistoric through Modern |  |
| ARTS AHS 4H History of Western Art: Prehistoric through Gothic – Honors |  |
| ARTS AHS 5 History of Western Art: Renaissance through Modern |  |
| ARTS ARTB 14 Basic Studio Arts |  |
| ARTS ARTB 13 Introduction to Music Appreciation |  |
| ARTS MUS 1A Music Literature Survey |  |
| ARTS MUS 11B Music Literature Survey |  |
| ARTS MUS 12 History of Jazz |  |
| ARTS MUS 13 Introduction to Music Appreciation |  |
| ARTS MUS 13H Introduction to Music Appreciation – Honors |  |
| ARTS MUS 14A World Music |  |
| ARTS MUS 14B American Folk Music |  |
| ARTS MUS 15 Rock Music History and Appreciation |  |
| ARTS MUS 15H Rock Music History and Appreciation – Honors |  |
| ARTS MUS 16 History of Photography |  |
| ARTS MUS 16H History of Photography – Honors |  |
| ARTS MUS 17 History of Theatre Arts |  |
| ARTS MUS 17H History of Theatre Arts – Honors |  |
| ARTS MUS 18 Principles of Acting I |  |

| LIFE SCIENCES |  |
| AGOR 1 Horticultural Science |  |
| ANAT 10A Introductory Human Anatomy |  |
| ANAT 10B Introductory Human Physiology |  |
| CHEM 35 Human Anatomy |  |
| CHEM 36 Human Physiology |  |
| ANTH 1 Biological Anthropology |  |
| ANTH 1H Biological Anthropology – Honors |  |
| ANTH 1L Biological Anthropology Laboratory |  |
| BIOL 1 General Biology |  |
| BIOL 2 Plant and Animal Biology |  |
| BIOL 3 Ecology and Field Biology |  |
| BIOL 4 Biology for Majors |  |
| BIOL 4H Biology for Majors – Honors |  |
| BIOL 6 Humans and the Environment |  |
| BIOL 6L Humans and the Environment Laboratory |  |
| BIOL 17 Neurobiology and Behavior |  |
| BIOL 20 Marine Biology |  |
| BIOL 21 Marine Biology Laboratory |  |
| MIRC 1 Principles of Microbiology |  |
| MIRC 22 Microbiology |  |
| PSYC 1B Biological Psychology |  |

| PROGRAMS LEADING TO AN ASSOCIATES DEGREE CONTINUED |  |

| AREA A: Communication in the English Language (6 units): |  |
| ARTS |  |
| ARTS AHS 1 Understanding the Visual Arts, or ARTB 1 Understanding the Visual Arts |  |
| ARTS AHS 1H Understanding the Visual Arts – Honors |  |
| ARTS AHS 2 Topics in Visual Art and Culture – Honors |  |
| ARTS AHS 3 History of Women and Gender in Art |  |
| ARTS AHS 3H History of Women and Gender in Art – Honors |  |
| ARTS AHS 4 History of Western Art: Prehistoric through Modern |  |
| ARTS AHS 4H History of Western Art: Prehistoric through Gothic – Honors |  |
| ARTS AHS 5 History of Western Art: Renaissance through Modern |  |

| GENERAL EDUCATION REQUIREMENTS FOR 2008-2009 (continued) |  |

| HIST 1 History of the U.S. |  |
| HIST 2 History of the U.S. – Honors |  |
| HIST 3 History of World Civilization |  |
| HIST 3H History of World Civilization – Honors |  |
| HIST 4 History of World Civilization |  |
| HIST 4H History of World Civilization – Honors |  |
| HIST 7 History of the U.S. |  |
| HIST 7H History of the U.S. – Honors |  |
| HIST 8 History of the U.S. |  |
| HIST 8H History of the U.S. – Honors |  |
| HIST 10 History of Asia |  |
| HIST 11 History of Asia |  |
| HIST 19 History of Mexico |  |
| HIST 30 History of the African American |  |
| HIST 31 History of the African American |  |
| HIST 35 History of Africa |  |
| HIST 36 Women in American History – Beyond the Stereotypes |  |
| HIST 39 California History |  |
| HIST 40 History of the Mexican American |  |
| HUMA 1 The Humanities |  |
| ITAL 1 Elementary Italian |  |
| ITAL 2 Continuing Elementary Italian |  |
| ITAL 3 Intermediate Italian |  |
| ITAL 4 Continuing Intermediate Italian |  |
| ITAL 5 Advanced Italian |  |
| ITAL 6 Continuing Advanced Italian |  |
| ITAL 60 Italian Culture Through Cinema |  |
| JAPN 1 Elementary Japanese |  |
| JAPN 2 Continuing Elementary Japanese |  |
| JAPN 3 Intermediate Japanese |  |
| JAPN 4 Continuing Intermediate Japanese |  |
| JAPN 5 Advanced Japanese |  |
| LATIN 1 Elementary Latin |  |
| LATIN 2 Continuing Elementary Latin |  |
| LATIN 3 Intermediate Latin |  |
| LIT 1 Early American Literature |  |
| LIT 2 Modern American Literature |  |
| LIT 6A Survey of English Literature |  |
| LIT 6B Survey of English Literature |  |
| LIT 11A World Literature |  |

*Courses may not be double counted to satisfy more than one area, even if a course is listed in more than one area.*
### GENERAL EDUCATION REQUIREMENTS FOR 2008-2009 (continued)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIT 14</td>
<td>Introduction to Modern Poetry</td>
</tr>
<tr>
<td>LIT 20</td>
<td>American Literature</td>
</tr>
<tr>
<td>LIT 25</td>
<td>Contemporary Mexican American Literature</td>
</tr>
<tr>
<td>LIT 33</td>
<td>Images of Women in Literature</td>
</tr>
<tr>
<td>LIT 35</td>
<td>Science Fiction and Fantasy Survey</td>
</tr>
<tr>
<td>LIT 40</td>
<td>Introduction to Mythology</td>
</tr>
<tr>
<td>LIT 46</td>
<td>The Bible as Literature: Old Testament</td>
</tr>
<tr>
<td>LIT 47</td>
<td>The Bible as Literature: New Testament</td>
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<tr>
<td>PHIL 5</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHIL 5H</td>
<td>Introduction to Philosophy – Honors</td>
</tr>
<tr>
<td>PHIL 12</td>
<td>Ethics</td>
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<td>PHIL 12H</td>
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<td>PHIL 15</td>
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<td>Continuing Intermediate Spanish</td>
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<tr>
<td>SPAN 5</td>
<td>Advanced Spanish</td>
</tr>
<tr>
<td>SPAN 6</td>
<td>Continuing Advanced Spanish</td>
</tr>
<tr>
<td>SPAN 11</td>
<td>Spanish for the Spanish Speaking</td>
</tr>
<tr>
<td>SPAN 12</td>
<td>Continuing Spanish for the Spanish Speaking</td>
</tr>
<tr>
<td>SPAN 25</td>
<td>Spanish Literature</td>
</tr>
</tbody>
</table>

### AREA D: Social, Political and Economic Institutions (6 units): U.S. History and American Institutions

Select one (1) course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1</td>
<td>History of the U.S.</td>
</tr>
<tr>
<td>HIST 7</td>
<td>History of the U.S.</td>
</tr>
<tr>
<td>HIST 7H</td>
<td>History of the U.S. – Honors</td>
</tr>
<tr>
<td>HIST 8</td>
<td>History of the U.S.</td>
</tr>
<tr>
<td>HIST 8H</td>
<td>History of the U.S. – Honors</td>
</tr>
<tr>
<td>HIST 30</td>
<td>History of the African American</td>
</tr>
<tr>
<td>HIST 31</td>
<td>History of the African American</td>
</tr>
</tbody>
</table>

*Women in American History – Beyond the Stereotypes
*History of the Mexican American
*Political Science
*Politics of the Mexican American
*American African Politics

### Elective Courses – select at least one (1) course from the following list (3 units):

- AGAG 1: Food Production, Land Use and Politics – A Global Perspective
- ANTH 20: Conservation of Natural Resources
- ANTH 3: Archaeology
- ANTH 5: Principles of Cultural Anthropology
- ANTH 22: General Cultural Anthropology
- ANTH 30: The Native American
- BUSC 1A: Principles of Economics – Macroeconomics
- BUSC 1AH: Principles of Economics – Macroeconomics – Honors
- BUSC 1B: Principles of Economics – Microeconomics
- BUSC 1BH: Principles of Economics – Microeconomics – Honors
- CHILD 1: Child, Family, School and Community
- CHILD 10: Child Growth and Development
- CHILD 10H: Child Growth and Development – Honors
- GEOG 2: Human Geography
- GEOG 2H: Human Geography – Honors
- GEOG 5: World Regional Geography
- GEOG 8: The Urban World
- GEOG 30: Geography of California
- HIST 3: History of World Civilization
- HIST 3H: History of World Civilization – Honors
- HIST 4: History of World Civilization
- HIST 4H: History of World Civilization – Honors
- HIST 10: History of Asia
- HIST 11: History of Asia
- HIST 19: History of Mexico
- HIST 35: History of Africa
- HIST 39: California History
- HIST 44: History of Native Americans
- JOUR 100: Mass Media and Society
- JOUR 107: Race, Culture, Sex, and Mass Media Images
- POLI 2: Political Science
- POLI 5: Political Science Theory
- POLI 9: Introduction to International Relations

### AREA E: Lifelong Understanding and Self-Development (3 units): Select one (1) course from the following:

- AD 3: Chemical Dependency: Intervention, Treatment and Recovery

*Courses may not be double counted to satisfy more than one area, even if a course is listed in more than one area.

### GENERAL EDUCATION REQUIREMENTS FOR 2008-2009 (continued)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1A</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>PSYC 1AH</td>
<td>Introduction to Psychology – Honors</td>
</tr>
<tr>
<td>PSYC 14</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>PSYC 19</td>
<td>Abnormal Psychology</td>
</tr>
<tr>
<td>*PSYC 25</td>
<td>The Psychology of Women</td>
</tr>
<tr>
<td>SOC 1</td>
<td>Sociology</td>
</tr>
<tr>
<td>SOC 1H</td>
<td>Sociology – Honors</td>
</tr>
<tr>
<td>SOC 2</td>
<td>Sociology</td>
</tr>
<tr>
<td>SOC 2H</td>
<td>Sociology – Honors</td>
</tr>
<tr>
<td>SOC 4</td>
<td>Introduction to Gerontology</td>
</tr>
<tr>
<td>SOC 5</td>
<td>Introduction to Criminology</td>
</tr>
<tr>
<td>SOC 14</td>
<td>Marriage and the Family</td>
</tr>
<tr>
<td>SOC 15</td>
<td>Child Development</td>
</tr>
<tr>
<td>SOC 20</td>
<td>Sociology of Ethnic Relations</td>
</tr>
<tr>
<td>SOC 20H</td>
<td>Sociology of Ethnic Relations – Honors</td>
</tr>
<tr>
<td>SPCH 7</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>SPCH 26</td>
<td>Intercultural Communication – Honors</td>
</tr>
</tbody>
</table>

### ALPHABETICAL LISTING — ASSOCIATE IN SCIENCE DEGREE (A.S.)

- **A**
  - Accounting: 69
  - Administrative Assistant: 69
  - Advertising Design and Illustration: 69
  - Agri-Technology: 69
  - Air Conditioning and Refrigeration: 70
  - Aircraft and Aircraft Powerplant: 70
  - Maintenance Technology – Day: 70
  - Maintenance Technology – Evening: 70
  - Alcohol/Drug Counseling: 70
  - Animation: 71
  - Architectural Technology – Design Concentration: 71

- **B**
  - Business: Management: 72
  - Business: Retail Management: 72
  - Chemical Laboratory Technician: 72
  - Child Development: 73
  - Commercial Flight: 73
  - Computer and Networking Technology: 73
  - Computer and Networking Technology: 74
  - Computer Graphics Design/Photography: 74
  - Computer Network Administration and Security Management: 74

**Mt. San Antonio College offers two-year occupational degrees in the following section of this Catalog. To qualify for the degree, students must complete the required courses for the major as shown, plus additional general education courses as listed on pages 66-67. For further information, please consult with Counseling and Advising Services on the upper level of the Student Services Center.**
Programs Leading to an Associates Degree

ALPHABETICAL LISTING — ASSOCIATE IN SCIENCE DEGREE (A.S.) (continued)

| B-C (continued) |  
|------------------|--------------------------------------------------|
| Computer Programmer – C++ | 74  
| Computer Programmer – Database Management Systems | 74  
| Computer Programmer – Telecommunications | 75  
| Computer Programmer – Visual Basic | 75  
| Construction Inspection | 75  
| Correctional Sciences | 75  
| Educational Paraprofessional | 75  
| Electronics and Computer Engineering Technology | 76  
| Emergency Medical Services | 76  
| Engineering Design Technology | 77  
| Equipment Technology | 77  
| Escrow Management | 77  
| Family and Consumer Sciences | 78  
| Fashion Design | 78  
| Fashion Merchandising | 78  
| Fire Technology | 78  
| Fire Technology – Administration | 79  
| Fire Technology – Administrative Communications | 79  
| Fire Technology – Administrative Law | 79  
| Fire Technology – Fire Management | 79  
| Fire Technology – Fire Prevention | 79  
| Fire Technology – Fire Training | 79  
| Fire Technology – Private Fire Service | 80  
| Floral Design | 80  
| General Business | 80  
| Histologic Technician Training | 81  
| Horse Ranch Management | 81  
| Hospitality and Restaurant Management | 81  
| Human Resource Management | 81  
| Interior Design | 81  
| Interior Design – Kitchen and Bath Design | 82  
| International Business | 82  
| Law Enforcement | 82  
| Licensed Vocational Nurse to RN | 82  
| Livestock Management | 83  
| Manufacturing Technology | 84  
| Marketing Management | 84  
| Mental Health Technology – Psychiatric Technician | 84  
| Nursing | 85  
| Ornamental Horticulture | 86  
| Paralegal/Legal – Bankruptcy Specialty | 87  
| Paralegal/Legal – Corporations/ Business Specialty | 87  
| Paralegal/Legal – Criminal Specialty | 87  
| Paralegal/Legal – Family Law Specialty | 87  
| Park & Sports Turf Management | 88  
| Pet Science | 89  
| Physical Education | 89  
| Psychiatric Technician to RN | 90  
| Radio Broadcasting | 91  
| Radiologic Technology | 91  
| Real Estate | 92  
| Real Estate Appraisal | 92  
| Registered Veterinary Technology | 93  
| Respiratory Therapy | 93  
| Sign Language/Interpreting | 94  
| Small Business Management | 95  
| Telecommunication Technology | 95  

LISTING BY INSTRUCTIONAL DIVISION — ASSOCIATE IN SCIENCE DEGREE (A.S.)

| Arts Division |  
|------------------|--------------------------------------------------|
| Advertising Design and Illustration | 66  
| Animation | 71  
| Computer Graphics Design/Photography | 74  
| Photography | 86  
| Radio Broadcasting: Behind the Scenes | 91  
| Radio Broadcasting: On the Air | 91  
| Television Production | 91  
| Business Division |  
| Accounting | 69  
| Administrative Assistant | 69  
| Business: Management | 72  
| Business: Retail Management | 72  
| Child Development | 73  
| Computer Network Administration & Security Management | 74  
| Computer Programmer – C++ | 74  
| Computer Programmer – Database Management Systems | 74  
| Computer Programmer – Telecommunications | 75  
| Computer Programmer – Visual Basic | 75  
| Escrow Management | 76  
| Fashion Design | 78  
| Fashion Merchandising | 78  
| General Business | 80  
| Hospitality and Restaurant Management | 81  
| Human Resource Management | 81  
| Interior Design | 81  
| Interior Design – Kitchen and Bath Design | 81  
| International Business | 83  
| Marketing Management | 84  
| Paralegal/Legal – Bankruptcy Specialty | 87  
| Paralegal/Legal – Corporations/ Business Specialty | 87  
| Paralegal/Legal – Criminal Specialty | 87  
| Paralegal/Legal – Family Law Specialty | 87  
| Park & Sports Turf Management | 88  
| Pet Science | 89  
| Physical Education | 89  
| Psychology | 90  
| Respiratory Therapy | 90  
| Small Business Management | 95  
| Visual Arts | 95  

| Chemical Laboratory Technician | 72  
| Equipment Technology | 77  
| Floral Design | 80  
| Histologic Technician Training | 80  
| Horse Ranch Management | 81  
| Livestock Management | 83  
| Ornamental Horticulture | 86  
| Park & Sports Turf Management | 89  
| Pet Science | 89  
| Registered Veterinary Technology | 93  

| Technology & Health Division |  
|------------------|--------------------------------------------------|
| Air Conditioning and Refrigeration | 70  
| Aircraft and Aircraft Powerplant Maintenance Technology | 70  
| Aeronautical & Astronautical Engineering Technology | 70  
| Aeronautical Science | 72  
| Aeronautics and Astronautics | 72  
| Aromatherapy | 72  
| Audiology | 72  
| Automotive Technology & Service | 72  
| Aviation Science | 72  
| Biotechnology | 72  
| Business: Management | 72  
| Business: Retail Management | 72  
| Child Development | 73  
| Computer Network Administration & Security Management | 74  
| Computer Programmer – C++ | 74  
| Computer Programmer – Database Management Systems | 74  
| Computer Programmer – Telecommunications | 75  
| Computer Programmer – Visual Basic | 75  
| Escrow Management | 77  
| Fashion Design | 78  
| Fashion Merchandising | 78  
| General Business | 80  
| Hospitality and Restaurant Management | 81  
| Human Resource Management | 81  
| Interior Design | 81  
| Interior Design – Kitchen and Bath Design | 81  
| International Business | 83  
| Marketing Management | 84  
| Paralegal/Legal – Bankruptcy Specialty | 87  
| Paralegal/Legal – Corporations/ Business Specialty | 87  
| Paralegal/Legal – Criminal Specialty | 87  
| Paralegal/Legal – Family Law Specialty | 87  
| Park & Sports Turf Management | 88  
| Pet Science | 89  
| Physical Education | 89  
| Psychology | 90  
| Respiratory Therapy | 90  
| Small Business Management | 95  
| Visual Arts | 95  

| Chemical Laboratory Technician | 72  
| Equipment Technology | 77  
| Floral Design | 80  
| Histologic Technician Training | 80  
| Horse Ranch Management | 81  
| Livestock Management | 83  
| Ornamental Horticulture | 86  
| Park & Sports Turf Management | 89  
| Pet Science | 89  
| Registered Veterinary Technology | 93  

Physical Education Division

| Physical Education | 89  
|------------------|--------------------------------------------------|
| Physical Education | 89  

| Technology & Health Division |  
|------------------|--------------------------------------------------|
| Air Conditioning and Refrigeration | 70  
| Aircraft and Aircraft Powerplant Maintenance Technology | 70  
| Aeronautical & Astronautical Engineering Technology | 70  
| Aeronautical Science | 72  
| Aeronautics and Astronautics | 72  
| Aromatherapy | 72  
| Audiology | 72  
| Automotive Technology & Service | 72  
| Aviation Science | 72  
| Biotechnology | 72  
| Business: Management | 72  
| Business: Retail Management | 72  
| Child Development | 73  
| Computer Network Administration & Security Management | 74  
| Computer Programmer – C++ | 74  
| Computer Programmer – Database Management Systems | 74  
| Computer Programmer – Telecommunications | 75  
| Computer Programmer – Visual Basic | 75  
| Escrow Management | 77  
| Fashion Design | 78  
| Fashion Merchandising | 78  
| General Business | 80  
| Hospitality and Restaurant Management | 81  
| Human Resource Management | 81  
| Interior Design | 81  
| Interior Design – Kitchen and Bath Design | 81  
| International Business | 83  
| Marketing Management | 84  
| Paralegal/Legal – Bankruptcy Specialty | 87  
| Paralegal/Legal – Corporations/ Business Specialty | 87  
| Paralegal/Legal – Criminal Specialty | 87  
| Paralegal/Legal – Family Law Specialty | 87  
| Park & Sports Turf Management | 88  
| Pet Science | 89  
| Physical Education | 89  
| Psychology | 90  
| Respiratory Therapy | 90  
| Small Business Management | 95  
| Visual Arts | 95  

| Chemical Laboratory Technician | 72  
| Equipment Technology | 77  
| Floral Design | 80  
| Histologic Technician Training | 80  
| Horse Ranch Management | 81  
| Livestock Management | 83  
| Ornamental Horticulture | 86  
| Park & Sports Turf Management | 89  
| Pet Science | 89  
| Registered Veterinary Technology | 93  

Programs Leading to an Associates Degree
This program is intended to prepare students for employment following graduation as administrative assistants, executive assistants, office managers, or other clerical and support staff. Training in a variety of computer and clerical skills is emphasized. Students desiring a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Programs Leading to an Associates Degree

The following programs list all courses needed to satisfy major requirements. Students may obtain certificates upon completion of required courses listed. Additional courses needed for completion of the Associate in Science Degree are listed in this catalog. It is recommended that all students consult with the department chairperson, faculty advisor, or counselor to file an educational plan.

These programs are intended to prepare students for employment following graduation. Students desiring a Bachelor's Degree (transfer program) should consult with the department chairperson, counselor or advisor to discuss transferability of courses. The curriculum is flexible in nature to allow for previous experience and specialization in a given area of agriculture and agricultural business.

Requirements for the Major

Required courses:

BUSO 25 Business Communications 3.0 CSU
BUSO 26 Oral Communications 3.0 for Business
COMP 2 Intermediate Computer Keyboarding 4.0
COMP 12 Office Computer Applications 4.0 CSU,UC
CSB 15 Microcomputer Applications 4.0 CSU,UC
COMP 20 Word for the Business Professional 4.0
COMP 28 Office Management Skills 3.0
COMP 50 Desktop Presentations 4.0 CSU
COMP 68 Transcription Techniques 3.0

PLUS

Select one (1) course from:

COMP 11 Internet Research for Business 2.0 CSU
COMP 13 Using Web Page Software 4.0 CSU
COMP 18 Data Entry 3.0
COMP 60 Business Publications Using Desktop Publishing Software 4.0 CSU

Total Units 33.0 - 35.0

Advertising Design and Illustration

Commercial and Entertainment Arts Major 21003

This program is designed to provide students with a combination of critical thinking skills, problem solving capacities, and the technical expertise necessary for entry level employment as a Graphic Designer or Illustrator in Advertising and related Visual Communication industries. Students completing the course are eligible for advanced training or for transfer to a college or university for further study.

Requirements for the Major

Required courses:

ARTC 60 Graphic Design: Lettering and Typography 3.0 CSU,UC
ARTC 66 Portfolio 3.0
ARTC 70 Computer Graphics: Introduction 3.0 CSU
ARTC 165 Illustration 3.0 CSU
ARTC 171 Computer Graphics 2: Advanced Layout and Design 3.0 CSU
ARTD 15A Drawing: Beginning 3.0 CSU,UC
ARTD 17A Drawing: Life 3.0 CSU,UC
ARTD 20 Design: Two Dimensional 3.0 CSU,UC
ARTD 25A Painting: Beginning 3.0 CSU,UC

PLUS

Select three (3) courses from:

ARTG 20 Digital Photography 3.0 CSU,UC
ARTC 77A Design/Illustration 3.0 CSU
ARTC 78A Design/Illustration 3.0 CSU
ARTD 16 Drawing: Perspective 3.0
ARTD 45 Printmaking: Silk-Screening Fundamentals 3.0
PHOT 10 Digital and Film Photography 3.0

Agri-Technology

Agricultural Sciences Department Major 21001

The program of courses in Agriculture is designed to enable students to prepare for a career in this essential and diverse profession. The department offers a comprehensive Agricultural Sciences program and is unique in that most courses provide hands-on experiences designed to give the student a combination of practical skills and technical knowledge. Students who intend to transfer should check the lower division requirements in the catalog of the college or university they will attend and also the semester and year in which the courses are offered.

Requirements for the Major

Required courses:

AGAG 1 Food Production, Land Use and Politics - A Global Perspective 3.0
AGAB 20 Microcomputer Applications in Agriculture 3.0 CSU,UC
AGAG 91 Food Production, Land Use and Politics - A Global Perspective 3.0
AGAN 1 Animal Science 3.0 CSU,UC
AGOR 2 Horticulture Science 3.0 CSU
AGOR 22 Design/Illustration 3.0 CSU
AGOR 24 Integrated Pest Management 3.0 CSU
AGOR 26 Landscape Construction Fundamentals 3.0
AGOR 61 Landscape Construction Fundamentals 3.0
AGRF 20 Conservation of Natural Resources 3.0 CSU,UC
AGL 14 Swine Production 3.0 CSU
AGL 16 Horse Production 4.0 CSU
AGL 17 Sheep Production 3.0 CSU
AGL 130 Beef Production 3.0 CSU
AGOR 24 Integrated Pest Management 3.0 CSU
AGOR 62 Landscape Irrigation - Design and Installation 3.0
AGPE 70 Animal Care and Welfare 3.0
AGPE 71 Animal Care and Welfare 3.0

Total Units 33.0 - 34.0
### Programs Leading to an Associates Degree

#### Air Conditioning and Refrigeration

**Air Conditioning, Water & Welding Technologies**  
**Major 20909**

This program is designed to prepare the student for employment in the broad field of air conditioning, heating and refrigeration and leads to occupations in design, manufacturing, operation, sales, distribution, installation, maintenance and repair. Students desiring a Bachelor's Degree (transfer program) should consult with an academic or advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**

- AIRM 10 Technical Mathematics 2.0 in Air Conditioning and Refrigeration
- AIRM 11 Welding for Air Conditioning and Refrigeration 2.0
- AIRM 12 Air Conditioning Codes and Standards 3.0
- AIRM 20 Refrigeration Fundamentals 3.0
- AIRM 25 Electrical Fundamentals 4.0
- AIRM 26A Heat Pump Fundamentals 1.5
- AIRM 26B Gas Heating Fundamentals 2.0
- AIRM 30 Heat Load Calculations 3.0
- AIRM 31 Commercial Electrical 4.0 for Air Conditioning and Refrigeration
- AIRM 32A Air Properties and Measurement 1.5
- AIRM 32B Air Distribution Systems 1.5
- AIRM 34 Advanced Mechanical 4.0 Refrigeration
- AIRM 37 Pneumatic Controls 2.0
- AIRM 39 Building Automation Systems 4.0

**Total Units** 37.5

#### Airframe and Aircraft Powerplant Maintenance Technology-Eveining

**Aircraft Maintenance Tech & Manufacturing Dept.**  
**Major 20951**

This program prepares students to enter employment as a certified airframe and powerplant technician in the aircraft maintenance industry. Training is given in the overhaul of various airframes and powerplants and their components. Completion of this program leads to an Associate in Science Degree. Two state-awarded certificates are also available upon successful completion of this program - one certificate in Airframe Maintenance Technology and one certificate in Aircraft Powerplant Maintenance Technology. Excellent opportunities for employment exist in this area of training. Certain administrative, quality control, and flight personnel careers require the applicant to hold a valid Airframe & Powerplant Certificate.

This program offers a day (full-time) or evening (part-time) program option. The only difference between the two options is the course numbering and time required to complete the program. Day program courses AIRM 65A and 65B are equivalent to evening program courses AIRM 90A, 90B, 91A, 91B, 92A, 92B, 93A, and 93B. The evening program courses are offered in 9-week modules.

Successful completion of this program enables students to take the FAA examinations in Airframe, General, and Powerplant. Passing the General Exam plus the Airframe and/or Powerplant Exam provides certification as an Aircraft Maintenance Technician, which is required for employment in this field. Students desiring a Bachelor's Degree (transfer program) should consult with an advisor or advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**

- AIRM 70A Aircraft Maintenance Technician 3.0
- AIRM 70B Aircraft Maintenance Technician 3.0
- AIRM 71 Aviation Maintenance Science 3.0
- AIRM 72 Aviation Materials and Processes 3.0
- AIRM 73 Aviation Welding 2.0
- AIRM 90A Airframe Maintenance Technology 3.0
- AIRM 90B Airframe Maintenance Technology 3.0
- AIRM 91A Airframe Maintenance Technology 3.0
- AIRM 91B Airframe Maintenance Technology 3.0
- AIRM 92A Airframe Maintenance Technology 3.0
- AIRM 92B Airframe Maintenance Technology 3.0
- AIRM 93A Airframe Maintenance Technology 3.0
- AIRM 93B Airframe Maintenance Technology 3.0
- AIRM 95A Aircraft Powerplant Maintenance Technology 3.0
- AIRM 95B Aircraft Powerplant Maintenance Technology 3.0
- AIRM 96A Aircraft Powerplant Maintenance Technology 3.0
- AIRM 96B Aircraft Powerplant Maintenance Technology 3.0
- AIRM 97A Aircraft Powerplant Maintenance Technology 3.0

**Recommended Electives:**

- AIRM 74 Aircraft Maintenance Technology - Work Experience
- AIRM 80 Lab Studies in Aircraft Maintenance Technology
- AIRM 81 Lab Studies in Aircraft Maintenance Technology
- EDT 12 Technical Engineering Drawing II
- ELEC 90 Survey of Electronics
- MFG 70 Technical Mathematics - Manufacturing Applications
- PHYS 1 Physics

**Airframe and Aircraft Powerplant Maintenance Technology-Day**  
**Aircraft Maintenance Tech & Manufacturing Dept.**  
**Major 20911**

This program prepares students to enter employment as a certified airframe and powerplant technician in the aircraft maintenance industry. Training is given in the overhaul of various airframes and powerplants and their components. Completion of this program leads to an Associate in Science Degree. Two state-awarded certificates are also available upon successful completion of this program - one certificate in Airframe Maintenance Technology and one certificate in Aircraft Powerplant Maintenance Technology. Excellent opportunities for employment exist in this area of training. Certain administrative, quality control, and flight personnel careers require the applicant to hold a valid Airframe & Powerplant Certificate.

This program offers a day (full-time) or evening (part-time) program. The only difference between the two options is the course numbering and time required to complete the program. Day program courses AIRM 65A and 65B are equivalent to evening program courses AIRM 90A, 90B, 91A, 91B, 92A, 92B, 93A, and 93B. The evening program courses are offered in 9-week modules.

Successful completion of this program enables students to take the FAA examinations in Airframe, General, and Powerplant. Passing the General Exam plus the Airframe and/or Powerplant Exam provides certification as an Aircraft Maintenance Technician, which is required for employment in this field. Students desiring a Bachelor's Degree (transfer program) should consult with an advisor or advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**

- AIRM 70A Aircraft Maintenance Technician 3.0
- AIRM 70B Aircraft Maintenance Technician 3.0
- AIRM 71 Aviation Maintenance Science 3.0
- AIRM 72 Aviation Materials and Processes 3.0
- AIRM 73 Aviation Welding 2.0
- AIRM 90A Airframe Maintenance Technology 3.0
- AIRM 90B Airframe Maintenance Technology 3.0
- AIRM 91A Airframe Maintenance Technology 3.0
- AIRM 91B Airframe Maintenance Technology 3.0
- AIRM 92A Airframe Maintenance Technology 3.0
- AIRM 92B Airframe Maintenance Technology 3.0
- AIRM 93A Airframe Maintenance Technology 3.0
- AIRM 93B Airframe Maintenance Technology 3.0
- AIRM 95A Aircraft Powerplant Maintenance Technology 3.0
- AIRM 95B Aircraft Powerplant Maintenance Technology 3.0
- AIRM 96A Aircraft Powerplant Maintenance Technology 3.0
- AIRM 96B Aircraft Powerplant Maintenance Technology 3.0
- AIRM 97A Aircraft Powerplant Maintenance Technology 3.0

**Total Units** 63.0

**Recommended Electives:**

- AIRM 74 Aircraft Maintenance Technology - Work Experience
- AIRM 80 Lab Studies in Aircraft Maintenance Technology
- AIRM 81 Lab Studies in Aircraft Maintenance Technology
- EDT 12 Technical Engineering Drawing II
- ELEC 90 Survey of Electronics
- MFG 70 Technical Mathematics - Manufacturing Applications
- PHYS 1 Physics

#### Alcohol/Drug Counseling

**Public Services Department**  
**Major 22101**

In this program the student integrates theory and practical experience in developing skills necessary to work with the alcohol and drug abuse population as well as families and employers of chemically-dependent persons. The curriculum is designed to meet the credentialing requirements of the California Association of Alcohol/Drug Educators. Students who complete this option qualify for employment in a variety of chemical-dependant settings.
Special Instructions:

a) Restricted Electives must be taken prior to enrollment in Field Experience.

b) Restricted Electives can be taken in conjunction with core and skills courses.

c) Refer to Schedule of Credit Classes for sequence of courses.

d) For questions, call the division office at (909) 594-5611, ext. 4750.

Working environment:

- May be exposed to infectious and contagious disease, without prior notification.
- May be exposed to the risk of blood borne diseases.
- Exposed to hazardous agents, body fluids and wastes.
- Exposed to odorous chemicals and specimens.
- Subject to hazards of flammable, explosive gases.
- Subject to burns and cuts.
- Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances.
- Handle emergency or crisis situations.
- Subject to many interruptions.
- Requires decisions/actions related to end of life issues.
- Exposed to products containing latex.
- Exposure to a highly charged emotional environment which can be stressful intense.

English Language Skills:

Although proficiency in English is not a criteria for admission into the nursing program, students are encouraged to be able to speak, write and read English to complete classes successfully and to ensure safety for themselves and for others.

Requirements for the Major

Required courses:

- ANIM 103 Drawing: Anatomy 3.0 CSU
- ANIM 104 Drawing Fundamentals or 3.0 CSU
- ANIM 105 Drawing: Gesture and Figure 3.0 CSU
- ARTD 15A Drawing: Beginning 3.0 CSU, UC
- ANIM 108 Principles of Animation 3.0 CSU
- ANIM 115 Storyboarding 3.0
- ANIM 116 Character Development 1.5
- ANIM 119 Portfolio 1.5
- ANIM 130 Introduction to 3-D Computer Animation 3.0
- ARTD 70 Computer Graphics: Introduction 3.0 CSU
- ARTD 17A Drawing: Life 3.0 CSU, UC
- ARTD 20 Design: Two Dimensional 3.0 CSU, UC
- ARTD 22 Design: Three-Dimensional 3.0 CSU, UC

PLUS

Select two (2) courses from:

- ANIM 117 Animation Background Layout 3.0 CSU
- ANIM 120 Script Development for Animation 3.0
- ANIM 132 Modeling, Texture Mapping and Lighting 3.0
- ANIM 175 Web Animation With Flash 3.0
- ARTD 16 Drawing: Perspective 3.0 CSU, UC

Total Units 36.0

Recommended Electives:

AHS 4 History of Western Art: Prehistoric Through Gothic 3.0
AHS 5 History of Western Art: Renaissance Through Modern 3.0
ANIM 107 Figure in Motion 3.0
ANIM 109 Advanced Principles of Animation 3.0
ANIM 111 Animal Drawing 3.0
ANIM 118 Background Painting 3.0
ANIM 120 Script Development for Animation 3.0
ANIM 134 Dynamic Digital Environments 3.0
ANIM 135 Visual Effects II: Particle Systems 3.0
ANIM 148 Demo-Reel 3.0
ARTD 25A Painting: Beginning 3.0

Architectural Technology - Design Concentration

Architecture and Engineering Design Department

Major 20020

This program prepares students to enter the field of architecture and related areas. The student is provided with an option of direct employment into the field or preparation for transfer to the professional school of architecture. Two concentrations are available. The Design Concentration focuses upon studio-based design projects, drawing, and presentation skills. The student will develop a portfolio of work relevant to their Concentration. A certificate program is also available.

Requirements for the Major

Required courses:

- ARCH 10 Design I - Elements of Design 3.0 CSU
- ARCH 11 Architectural Drawing 3.0 CSU
- ARCH 12 Architectural Materials and Specifications 3.0 CSU
- ARCH 13 Architectural Illustration 3.0 CSU, UC
- ARCH 16 Basic CAD and Computer Application 4.0 CSU, UC
- ARCH 21 Design II - Architectural Design 3.0 CSU
- ARCH 22 Architectural Presentations 3.0 CSU
- ARCH 23 Design III - Environmental Design 3.0 CSU, UC
- ARCH 29 Design IV - Advanced Project 3.0 CSU
- ARCH 31 World Architecture I 3.0 CSU
- ARCH 32 World Architecture II 3.0 CSU, UC

PLUS

Select one (1) course from:

- ARCH 15 Architectural Working Drawings - I 3.0 CSU
- ARCH 18 Architectural Computer Aided Design Elements 3.0 CSU

Total Units 38.0 - 40.0

Programs Leading to an Associates Degree

Eligibility Requirements and Selection Procedures

Eligibility Requirements:

- File a College application and be accepted as a student at Mt. San Antonio College.
- Selection Procedures All classes are open to all students who meet admission requirements and course prerequisites.
Programs Leading to an Associates Degree

Architectural Technology - Technology Concentration
Architecture and Engineering Design Department
Major 20201

This program prepares students to enter the field of architecture and related areas. The student is provided with an option of direct employment into the field or preparation for transfer to the professional school of architecture. Two concentrations are available. The Technology Concentration focuses upon building and construction technology, documentation, codes, and computer applications. Current technology and computer (CAD) skills are integrated into the program. A certificate program is also available.

Requirements for the Major
Required courses:
ARCH 10 Design I - Elements of Design 3.0 CSU
ARCH 11 Architectural Drawing 3.0 CSU,UC
ARCH 12 Architectural Materials and Specifications 3.0 CSU
ARCH 14 Building and Zoning Codes 3.0 CSU
ARCH 15 Architectural Working Drawings - I 3.0 CSU
ARCH 16 Basic CAD and Computer Application 4.0 CSU,UC
ARCH 18 Architectural Computer Aided Design Elements 3.0 CSU
ARCH 26 Architectural CAD 3.0 CSU
ARCH 28 Architectural CAD 3.0 CSU
ARCH 29 Design IV - Advanced Project 3.0 CSU
EDT 20 Technical Descriptive Geometry 3.0 CSU
INS P 70 Elements of Construction 3.0 CSU

PLUS
Select one (1) course from:
ARCH 13 Architectural Illustration 3.0 CSU,UC
ARCH 21 Design II - Architectural Design 3.0 CSU
ARCH 23 Architectural Presentations 3.0 CSU
ARCH 31 World Architecture I 3.0 CSU,UC
ARCH 32 World Architecture II 3.0 CSU,UC
ARCH 89 Architectural Work Experience 1.0
ARCH 90 Architectural Work Experience 2.0
EDT 26 Civil Engineering Technology and CAD 3.0 CSU,UC
INS P 71 Construction Estimating 3.0 CSU

Total Units 38.0 - 40.0

Recommended Electives:
MATH 150 Trigonometry
PHYS 2AG General Physics

MATH 150 AND PHYS 2AG typically are required for transfer to a professional school of architecture. Verify all requirements with the transfer institution.

Aviation Science Aeronautics, Transportation and Travel Department
Major 20910

This curriculum meets the requirements of the Federal Aviation Administration Collegiate Training Initiative (CTI). Under an educational partnership agreement with the FAA, this CTI program prepares students for broad-based aviation careers. Students completing this CTI program may be recommended by the college for hiring by the FAA as air traffic controllers.

Requirements for the Major
Required courses:
ARCH 10 Design I - Elements of Design 3.0 CSU
ARCH 11 Architectural Drawing 3.0 CSU,UC
ARCH 12 Architectural Materials and Specifications 3.0 CSU
ARCH 14 Building and Zoning Codes 3.0 CSU
ARCH 15 Architectural Working Drawings - I 3.0 CSU
ARCH 16 Basic CAD and Computer Application 4.0 CSU,UC
ARCH 18 Architectural Computer Aided Design Elements 3.0 CSU
ARCH 26 Architectural CAD 3.0 CSU
ARCH 28 Architectural CAD 3.0 CSU
ARCH 29 Design IV - Advanced Project 3.0 CSU
EDT 20 Technical Descriptive Geometry 3.0 CSU
INS P 70 Elements of Construction 3.0 CSU

PLUS
Select one (1) course from:
ARCH 13 Architectural Illustration 3.0 CSU,UC
ARCH 21 Design II - Architectural Design 3.0 CSU
ARCH 23 Architectural Presentations 3.0 CSU
ARCH 31 World Architecture I 3.0 CSU,UC
ARCH 32 World Architecture II 3.0 CSU,UC
ARCH 89 Architectural Work Experience 1.0
ARCH 90 Architectural Work Experience 2.0
EDT 26 Civil Engineering Technology and CAD 3.0 CSU,UC
INS P 71 Construction Estimating 3.0 CSU

Total Units 38.0 - 40.0

Recommended Electives:
MATH 150 Trigonometry
PHYS 2AG General Physics

MATH 150 AND PHYS 2AG typically are required for transfer to a professional school of architecture. Verify all requirements with the transfer institution.

Business: Management Accounting and Management Department
Major 20506

This program is intended to prepare students for employment following graduation. Students wishing a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
BUS M 20 Principles of Business 3.0 CSU
BUS M 51 Principles of International Business 3.0 CSU

Recommended Electives:
BUS A 9 transfers to a B.S. degree in Business Administration.

BUS M 60 Human Relations in Business 3.0 CSU
BUS M 61 Business Organization and Management 3.0 CSU
BUS M 62 Human Resource Management 3.0 CSU
BUS M 63 Principles of Marketing 3.0 CSU
CIS B 15 Microcomputer Applications 4.0 CSU,UC

Total Units 30.0

Business: Retail Management Accounting and Management Department
Major 20509

This program exposes students to the business world and the role of retail distribution. Students become familiar with careers in retail management as well as the latest trends in this fast changing field. Completion of this program aids the student's search for an entry-level job in retail management.

Requirements for the Major
Required courses:
BUS M 7 Principles of Accounting - Financial 5.0 CSU,UC
BUS M 8 Bookkeeping - Accounting 5.0
BUS M 11 Fundamentals of Accounting 3.0 CSU
BUS M 60 Human Relations in Business 3.0 CSU
BUS M 61 Business Organization and Management 3.0 CSU
BUS M 62 Human Resource Management 3.0 CSU
BUS M 63 Principles of Marketing 3.0 CSU
CIS B 15 Microcomputer Applications 4.0 CSU,UC
FASH M 6 Retail Store Management 4.0 CSU

Recommended Electives:
BUS A 11 Fundamentals of Accounting 3.0 CSU
BUS M 60 Human Relations in Business 3.0 CSU
BUS M 61 Business Organization and Management 3.0 CSU
BUS M 62 Human Resource Management 3.0 CSU
BUS M 63 Principles of Marketing 3.0 CSU
CIS B 15 Microcomputer Applications 4.0 CSU,UC

Total Units 33.0

Chemical Laboratory Technician Biological Sciences Department
Major 20950

This program provides theoretical and technical training to prepare students for employment at entry-level positions in fields such as chemical quality control, chemical process control, analytical chemistry, water quality, and research and development. The program includes a broad-based overview of workforce options and emphasizes development of analytical skills, instrument proficiency, critical thinking, and troubleshooting of experimental designs and outcomes.

Course 1
CIS B 15 Microcomputer Applications 4.0 CSU,UC

Recommended Electives:
BUS A 9 transfers to a B.S. degree in Business Administration.

Total Units 30.0
Requirements for the Major

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSM 10</td>
<td>3.0</td>
<td>Principles of Continuous</td>
</tr>
<tr>
<td>Quality Improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 20</td>
<td>5.0</td>
<td>Introductory Organic</td>
</tr>
<tr>
<td>and Biochemistry</td>
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<td></td>
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<tr>
<td>CHEM 50</td>
<td>5.0</td>
<td>General Chemistry I</td>
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<tr>
<td>CHEM 51</td>
<td>5.0</td>
<td>General Chemistry II</td>
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<td>CHEM 60</td>
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<td>CHEM 75</td>
<td>5.0</td>
<td>Instrumental Analysis</td>
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<tr>
<td>CHMT 1</td>
<td>3.0</td>
<td>Introduction to Chemical</td>
</tr>
<tr>
<td>Laboratory Technology</td>
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<td></td>
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<tr>
<td>CHMT 8</td>
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<td>Work Experience in Chemical</td>
</tr>
<tr>
<td>Technology</td>
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<td></td>
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<tr>
<td>CHMT 9</td>
<td>2.0</td>
<td>Work Experience in Chemical</td>
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<tr>
<td>Technology</td>
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<td>PLUS</td>
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<tr>
<td>Select six (6) units from:</td>
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<tr>
<td>CHMT 5</td>
<td>2.0</td>
<td>Elementary Principles of</td>
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<td>Chemical Processing</td>
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<tr>
<td>MICR 22</td>
<td>4.0</td>
<td>Microbiology</td>
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<tr>
<td>PHIL 12H</td>
<td>3.0</td>
<td>Ethics - Honors</td>
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<td>SPCH 26</td>
<td>3.0</td>
<td>Interpersonal Communication</td>
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<td></td>
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<td>or</td>
</tr>
<tr>
<td>SPCH 26H</td>
<td>3.0</td>
<td>Interpersonal Communication</td>
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<td></td>
<td>- Honors</td>
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</table>

Child Development

Child Development
Major 21315

This program introduces students to the study of young children and their education and prepares students for employment following graduation in the field of Child Development. An Associate in Science Degree and eleven certificates are offered. Students desiring a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
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<tbody>
<tr>
<td>CHLD 1</td>
<td>3.0</td>
<td>Child, Family and Community</td>
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<td>CHLD 5</td>
<td>3.0</td>
<td>Principles/Practices in</td>
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<tr>
<td></td>
<td></td>
<td>Child Development Programs</td>
</tr>
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<td>CHLD 6</td>
<td>3.0</td>
<td>Survey of Child Development</td>
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<tr>
<td>Curriculum</td>
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<td>CHLD 10</td>
<td>3.0</td>
<td>Child Development</td>
</tr>
<tr>
<td>or</td>
<td></td>
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<tr>
<td>CHLD 104</td>
<td>3.0</td>
<td>Child Growth and Development</td>
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<tr>
<td>or</td>
<td></td>
<td>- Honors</td>
</tr>
<tr>
<td>CHLD 64</td>
<td>3.0</td>
<td>Health, Safety and Nutrition</td>
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<tr>
<td>of Young Children</td>
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<td></td>
</tr>
<tr>
<td>CHLD 66</td>
<td>2.0</td>
<td>Early Childhood Development</td>
</tr>
<tr>
<td>Observation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHLD 66L</td>
<td>1.0</td>
<td>Early Childhood Development</td>
</tr>
<tr>
<td>Observation Laboratory</td>
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<tr>
<td>CHLD 67</td>
<td>2.0</td>
<td>Early Childhood Development</td>
</tr>
<tr>
<td>Participation</td>
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<tr>
<td>CHLD 67L</td>
<td>1.0</td>
<td>Early Childhood Development</td>
</tr>
<tr>
<td>Participation Laboratory</td>
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</tr>
<tr>
<td>CHLD 68</td>
<td>3.0</td>
<td>Children With Special Needs</td>
</tr>
<tr>
<td>CHLD 69</td>
<td>2.0</td>
<td>Early Childhood Development</td>
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<tr>
<td>Field Work Seminar</td>
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<tr>
<td>CHLD 84</td>
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<td>Guidance and Discipline</td>
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<tr>
<td>in Child Development</td>
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<td>Settings</td>
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<tr>
<td>CHLD 91</td>
<td>1.0</td>
<td>Early Childhood Development</td>
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<tr>
<td>Field Work</td>
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<td>Total Units</td>
<td>28.0</td>
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Recommended Electives:

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<th>Units</th>
<th>Notes</th>
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<tbody>
<tr>
<td>CHLD 50</td>
<td>3.0</td>
<td>Multicultural Education:</td>
</tr>
<tr>
<td>Anti-Bias Perspective</td>
<td></td>
<td></td>
</tr>
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<td>CHLD 51</td>
<td>3.0</td>
<td>Early Literacy in Child</td>
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<tr>
<td>Development</td>
<td></td>
<td></td>
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<tr>
<td>CHLD 61</td>
<td>3.0</td>
<td>Language Arts &amp; Art Media</td>
</tr>
<tr>
<td>for Young Children</td>
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<td></td>
</tr>
<tr>
<td>CHLD 62</td>
<td>3.0</td>
<td>Music and Motor Development</td>
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<td>for Young Children</td>
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</tr>
<tr>
<td>CHLD 63</td>
<td>3.0</td>
<td>Creative Sciences and Math</td>
</tr>
<tr>
<td>for Young Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHLD 71A</td>
<td>1.0</td>
<td>Administration of Child</td>
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<tr>
<td>Development Programs</td>
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</tr>
<tr>
<td>CHLD 71B</td>
<td>1.0</td>
<td>Management/Marketing/Personnel</td>
</tr>
<tr>
<td>for ECD Programs</td>
<td></td>
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<tr>
<td>CHLD 72</td>
<td>3.0</td>
<td>Teacher, Parent, and Child Relationships</td>
</tr>
<tr>
<td>CHLD 73</td>
<td>3.0</td>
<td>Infant/Toddler Care and Development</td>
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</tbody>
</table>

Commercial Flight

Aeronautics, Transportation and Travel Department
Major 20912

The Commercial Flight curriculum prepares students for careers as aircraft pilots as well as related ground occupations in aviation. Students have the opportunity for optional flight training with commuter airline credit. The pilot license is not required for graduation but it is desirable for career advancement.

This program prepares students for military and civilian aviation careers through transfer programs to Bachelor’s Degree aviation curricula throughout the nation. With concurrent flight training, students may achieve the commercial pilot certificate and instrument rating simultaneously with the A.S. Degree.

Requirements for the Major

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
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<tbody>
<tr>
<td>AERO 23</td>
<td>4.0</td>
<td>Primary Pilot Ground School</td>
</tr>
<tr>
<td>AERO 24</td>
<td>3.0</td>
<td>Navigation</td>
</tr>
<tr>
<td>AERO 25</td>
<td>3.0</td>
<td>Commercial Pilot Ground</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AERO 26</td>
<td>3.0</td>
<td>Aviation Weather</td>
</tr>
<tr>
<td>AERO 27</td>
<td>3.0</td>
<td>Aviation Safety</td>
</tr>
<tr>
<td>and Human Factors</td>
<td></td>
<td></td>
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<tr>
<td>AERO 28</td>
<td>3.0</td>
<td>Aircraft and Engines</td>
</tr>
<tr>
<td>AERO 29</td>
<td>2.0</td>
<td>Federal Aviation Regulations</td>
</tr>
<tr>
<td>AERO 30</td>
<td>3.0</td>
<td>Instrument Ground School</td>
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<tr>
<td>TRAN 17</td>
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<td>Air Transportation</td>
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Recommended Electives:

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<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
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<tbody>
<tr>
<td>AERO 40</td>
<td>4.0</td>
<td>Flight</td>
</tr>
<tr>
<td>AERO 40L</td>
<td>4.0</td>
<td>Flight Laboratory</td>
</tr>
<tr>
<td>AERO 41</td>
<td>4.0</td>
<td>Basic Flight Simulator</td>
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<tr>
<td>Laboratory</td>
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</tr>
<tr>
<td>AERO 58</td>
<td>3.0</td>
<td>Flight Instructor Ground</td>
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<td>School</td>
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<tr>
<td>AIRT 41</td>
<td>3.0</td>
<td>Aircraft Recognition and Performance</td>
</tr>
<tr>
<td>CSIB 11</td>
<td>1.0</td>
<td>Computer Information Systems</td>
</tr>
</tbody>
</table>
| The Commercial Flight faculty recommend that students complement their studies with selected elective courses chosen from the list above. Students should meet with a professor of commercial flight to help them determine which electives would best suit their career plans.

Computer and Networking Technology

Electronics and Computer Technology Department
Major 20725

The Computer and Networking Technology Major prepares students to enter the computer and networking fields as service technicians. The program provides foundations in basic electronics, computer servicing, operating systems, network/server servicing, security systems and customer relations. The student will be prepared to perform installation, software configuration and the maintenance, operation, troubleshooting and repair of computers and their associated networking software/hardware. In addition, the program prepares students to take the A+, Network+, Server+ and Security+ certification tests offered at testing centers throughout the country. These certifications are CompTIA sponsored and are worldwide-recognized industry benchmarks for the computer and networking technician. Multi-level certificates are also available.

Requirements for the Major

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>CNET 50</td>
<td>4.0</td>
<td>PC Servicing</td>
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<tr>
<td>CNET 52</td>
<td>4.0</td>
<td>Operating Systems</td>
</tr>
<tr>
<td>CNET 54</td>
<td>4.0</td>
<td>PC Troubleshooting</td>
</tr>
<tr>
<td>CNET 56</td>
<td>4.0</td>
<td>Computer Networks</td>
</tr>
<tr>
<td>CNET 60</td>
<td>1.0</td>
<td>A+ Certification Preparation</td>
</tr>
<tr>
<td>CNET 62</td>
<td>3.0</td>
<td>Network+ Certification Preparation</td>
</tr>
<tr>
<td>CNET 64</td>
<td>3.0</td>
<td>Server + Certification Preparation</td>
</tr>
<tr>
<td>CNET 66</td>
<td>3.0</td>
<td>Security + Certification Preparation</td>
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<td>ELEC 11</td>
<td>3.0</td>
<td>Microcomputer Applications</td>
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<tr>
<td>in Microcomputers</td>
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<tr>
<td>CSIB 15</td>
<td>4.0</td>
<td>Microcomputer Applications</td>
</tr>
<tr>
<td>CSIB 50A</td>
<td>4.0</td>
<td>Electronic Circuits (DC)</td>
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<tr>
<td>CSIB 50B</td>
<td>4.0</td>
<td>Electronic Circuits (AC)</td>
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<tr>
<td>ELEC 56</td>
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<td>Digital Electronics</td>
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<td>TECH 60</td>
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<td>Customer Relations for the Technician</td>
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Recommended Electives:

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<tbody>
<tr>
<td>ELEC 51</td>
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<td>Electronic Devices</td>
</tr>
<tr>
<td>ELEC 74</td>
<td>3.0</td>
<td>Microprocessor Systems</td>
</tr>
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</table>

Programs Leading to an Associates Degree
### Programs Leading to an Associates Degree

#### Computer Graphics Design/Photography

**Commercial and Entertainment Arts**

**Major 21005**

This program is designed to prepare students for employment in the field of computer graphics/photography. A variety of career opportunities are available in art, cinema, communications, industrial arts, graphics, and journalism. Students desiring a Bachelor's degree should consult with a counselor or advisor to transfer to a university.

**Requirements for the Major**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHOT 15</td>
<td>History of Photography</td>
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<tr>
<td>PHOT 4</td>
<td>Digital Cameras and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>CISN 40</td>
<td>Networking Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>CISN 51</td>
<td>Computer Systems Administration</td>
<td>4.0</td>
</tr>
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<td>CSS 21</td>
<td>Network Security and Firewalls</td>
<td>4.0</td>
</tr>
<tr>
<td>SL 2</td>
<td>Linked Service Learning</td>
<td>1.0</td>
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<td>PLUS</td>
<td>Select one (1) course from:</td>
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<tr>
<td>CISM 11</td>
<td>Computer Information Systems</td>
<td>3.5</td>
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<tr>
<td>CISM 31</td>
<td>Operating System</td>
<td>4.0</td>
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<tr>
<td>CISM 34</td>
<td>LINUX Networking and Security</td>
<td>4.0</td>
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<tr>
<td>CISM 41</td>
<td>Novell Netware Systems Administration</td>
<td>4.0</td>
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</tbody>
</table>

**Total Units:** 27.0

**Recommended Electives:**

- AHS 1 Understanding the Visual Arts
- ARTB 1 Understanding the Visual Arts
- COMP 10 Operating the Macintosh Computer
- GRAP 4 Work Experience in Computer Graphics
- PHOT 1 Laboratory Studies: Black and White Photography
- PHOT 2 Laboratory Studies: Color Photography
- PHOT 4 Digital Cameras and Composition
- PHOT 15 History of Photography

#### Computer Network Administration and Security Management

**Computer Information Systems Department Major 20701**

Computer Network Administration and Security Management is a two-year program leading to the Associate in Science (A.S.) Degree. It prepares individuals for employment in the computer/information technology field in such areas as network administrator and security management administrator.

The curriculum is intended to help students develop skills to design, administer and manage the heterogeneous corporate network with security emphasis. The courses examine and illustrate network security with various industry-leading network operating systems. Individual courses will assist students in preparing for related industry certification exams.

The main objective of the degree is to prepare students for employment following graduation. Students wishing a Bachelor's Degree must meet with a counselor or advisor to discuss transferability of courses. Additional recommended courses for transfer are BUSA 8 and BUSL 18.

**Coursework includes a list of core courses and additional courses for each option.**

**The object oriented C++ language is available on many platforms. It is used extensively in the development of applications on microcomputers and is known for its power and flexibility.**

**Requirements for the Major**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISM 11</td>
<td>Telecommunications/</td>
<td>4.0</td>
</tr>
<tr>
<td>CISM 24</td>
<td>Microsoft NT Network</td>
<td>4.0</td>
</tr>
<tr>
<td>CISM 51</td>
<td>Cisco CCNA Networking Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS 21</td>
<td>Network Vulnerabilities and Countmeasures</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS 23</td>
<td>Network Analysis and NIDS</td>
<td>4.0</td>
</tr>
<tr>
<td>CSS 25</td>
<td>Network Security and Firewalls</td>
<td>4.0</td>
</tr>
<tr>
<td>SL 2</td>
<td>Linked Service Learning</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Total Units:** 28.5 - 29.0

**Computer Programmer - C++**

**Computer Information Systems Department Major 20704**

The Computer Information Systems major is a two-year program leading to the Associate in Science (A.S.) Degree. It prepares individuals for employment in the computer field in such areas as application development, systems analysis, and telecommunications.

The courses in Computer Information Systems emphasize the development of applications in a business environment. They introduce the latest technologies including development of graphical user interfaces using object-oriented methodologies and client/server applications.

The program is designed to prepare students for employment following graduation. Students wishing a Bachelor's Degree should meet with a counselor or advisor to discuss transferability of courses. Additional recommended courses for transfer are BUSA 8 and BUSL 18.

**Coursework includes a list of core courses and additional courses for each option.**

**The object oriented C++ language is available on many platforms. It is used extensively in the development of applications on microcomputers and is known for its power and flexibility.**

**Requirements for the Major**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISM 11</td>
<td>Computer Information Systems</td>
<td>3.5</td>
</tr>
<tr>
<td>CISM 15</td>
<td>Microcomputer Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>CISM 11</td>
<td>Systems Analysis and Design</td>
<td>3.5</td>
</tr>
<tr>
<td>CISM 14</td>
<td>Computer Information Systems Seminar</td>
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</tr>
<tr>
<td>CISM 21</td>
<td>Client/Server Architecture</td>
<td>4.0</td>
</tr>
<tr>
<td>CISP 21</td>
<td>Programming in Java</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Units:** 40.0

#### Computer Programmer - Database Management Systems

**Computer Information Systems Department Major 20706**

The Computer Information Systems major is a two-year program leading to the Associate in Science (A.S.) Degree. It prepares individuals for employment in the computer field in such areas as application development, systems analysis, and telecommunications.

The courses in Computer Information Systems emphasize the development of applications in a business environment. They introduce the latest technologies including development of graphical user interfaces using object-oriented methodologies and client/server applications.

The program is designed to prepare students for employment following graduation. Students wishing a Bachelor's Degree (transfer program) should meet with a counselor or advisor to discuss transferability of courses. Additional recommended courses for transfer are BUSA 8 and BUSL 18.

**Coursework includes a list of core courses and additional courses for each option.**

**This option concentrates on the design, development, and maintenance of relational databases on microcomputers. Applications are developed using power-user and programming techniques.**

**Requirements for the Major**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 7</td>
<td>Principles of Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>CISM 11</td>
<td>Computer Information Systems</td>
<td>3.5</td>
</tr>
<tr>
<td>CISM 15</td>
<td>Microcomputer Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>CISM 11</td>
<td>Systems Analysis and Design</td>
<td>3.5</td>
</tr>
<tr>
<td>CISM 14</td>
<td>Computer Information Systems Seminar</td>
<td>4.0</td>
</tr>
<tr>
<td>CISM 21</td>
<td>Client/Server Architecture</td>
<td>4.0</td>
</tr>
<tr>
<td>CISP 21</td>
<td>Programming in Java</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Units:** 46.0
The Computer Information Systems Department

**Course Descriptions**

**Computer Programmer - Telecommunications**

**Computer Information Systems Department Major 20708**

The Computer Information Systems major is a two-year program leading to the Associate in Science (A.S.) Degree. It prepares individuals for employment in the computer field in such areas as application development, systems analysis, and telecommunications.

The courses in Computer Information Systems emphasize the development of applications in a business environment. They introduce the latest technologies, including development of graphical user interfaces using object-oriented methodologies and client/server applications.

The program is designed to prepare students for employment following graduation. Students wishing a Bachelor’s Degree (transfer program) should meet with a counselor or advisor to discuss transferability of courses. Additional course work includes a list of core courses and additional courses for each option.

The network option focuses on the communication of data between systems. Topics include network infrastructure, protocols, and the Internet.

**Requirements for the Major**

**Required core courses:**

- BUSA 7 Principles of Accounting - Financial 3.0 CSU, UC
- CISB 11 Computer Information Systems 3.5 CSU, UC
- CISB 15 Microcomputer Applications 4.0 CSU, UC
- CISN 11 Systems Analysis and Design 3.5 CSU, UC
- CISN 14 Computer Information Systems Seminar 4.0
- CISN 21 Client/Server Architecture 4.0

**Total Units 40.0**

**Computer Programmer - Visual Basic**

**Computer Information Systems Department Major 20709**

The Computer Information Systems major is a two-year program leading to the Associate in Science (A.S.) Degree. It prepares individuals for employment in the computer field in such areas as application development, systems analysis, and telecommunications.

The courses in Computer Information Systems emphasize the development of applications in a business environment. They introduce the latest technologies including development of graphical user interfaces using object-oriented methodologies and client/server applications.

The program is designed to prepare students for employment following graduation. Students wishing a Bachelor’s Degree (transfer program) should meet with a counselor or advisor to discuss transferability of courses. Additional recommended courses for transfer are BUSA 8 and BUSL 18.

Course work includes a list of core courses and additional courses for each option.

Visual Basic is a leading development tool in the Windows environment and in client/server applications. This object-oriented language is used to develop applications on the Windows environment and in client/server applications.

**Requirements for the Major**

**Required core courses:**

- BUSA 7 Principles of Accounting - Financial 5.0 CSU, UC
- CISB 11 Computer Information Systems 3.5 CSU, UC
- CISB 15 Microcomputer Applications 4.0 CSU, UC
- CISB 21 Client/Server Architecture 4.0

**Total Units 40.0**

**Construction Inspection**

**Architecture and Engineering Design Department Major 20920**

This program is intended to prepare students for employment following graduation. Students desiring a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**

- ARCH 12 Architectural Materials and Specifications 3.0 CSU
- ARCH 14 Building and Zoning Codes 3.0
- INSF 17 Legal Aspects of Construction 3.0 CSU
- INSF 70 Elements of Construction 3.0 CSU
- INSF 71 Construction Estimating 3.0 CSU
- INSF 87 Fundamentals of Construction Inspection 3.0

**Total Units 18.0**

**Recommended Electives:**

- ARCH 11 Architectural Drawing
- ARCH 15 Architectural Working Drawings - I
- INSF 67 Reading Construction Drawings

**Correctional Sciences**

**Public Services Department Major 22103**

Correctional Sciences is the application of law, social, and natural sciences to the social phenomenon of crime and delinquency. The discipline addresses definitions, causation, prevention, discovery, procedures, treatment and rehabilitation, quantification, and research in both criminal and civil aspects.

This program is intended to prepare students for employment following graduation. Students desiring a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**

- ADJU 68 Administration of Justice Report Writing 3.0
- CORS 10 Introduction to Correctional Sciences 3.0 CSU
- CORS 15 Control and Supervision of the Offender 3.0
- CORS 20 Correctional Law 3.0
- CORS 25 Probation and Parole 3.0
- CORS 30 Ethnic Relations in Corrections 3.0

**Total Units 30.0**

**Recommended Electives:**

- PE-F 50 Physical Skills Preparation for Law Enforcement and Fire Science
- PE-F 51 Agility Testing Preparation for Law Enforcement and Fire Science
- PE-F 52 Fitness and Conditioning for Law Enforcement, Fire Science and Forestry
- SPAN 66 Spanish for Fire and Police Personnel

The Correctional Sciences faculty recommend that students complement their studies with selected elective courses chosen from the list above. Students should meet with a professor of Correctional Sciences to help them determine which electives would best suit their career plans.

**Educational Paraprofessional**

**Psychology and Education Department Major 22117**

This degree program in the field of education prepares paraprofessionals in a variety of areas, emphasizing working with children to enhance their learning development. Graduates will be able to assist classroom teachers in working with K-12 students, including students with special needs. This associate degree certifies that paraprofessionals are “highly qualified” according to current federal legislation.

**Requirements for the Major**

**Required courses:**

- CHLD 1 Child, Family and Community 3.0 CSU, UC
- CHLD 10 Child Growth and Development 3.0 CSU, UC
- PSYC 14 Developmental Psychology 3.0 CSU, UC
- CHLD 68 Children With Special Needs 3.0

**Total Units 30.0**

**Programs Leading to an Associates Degree**
Programs Leading to an Associates Degree

**EDUC 10** Introduction to Education 3.0 CSU,UC
**EDUC 16** Aspects and Issues in Teaching Service Learning 3.0 CSU,UC
**ENGL 1A** Freshman Composition 3.0 CSU,UC
**MATH 71** Intermediate Algebra 5.0

**Total Units** 23.0

**Recommended Electives:**
- CHILD 51 Early Literacy in Child Development
- CHILD 64 Health, Safety and Nutrition of Young Children
- LIT 40 Children’s Literature
- PE 3 First Aid and CPR

**Electronics and Computer Engineering Technology**

**Electronics and Computer Technology Department Major 20906**

This curriculum starts with basic electronic components and circuitry, culminates with course work in electronic systems, and is characterized by advanced coursework in three major areas. These include microprocessors and interfacing, electronic communications, and industrial electronics. Students completing the program will have training in all the major areas of electronics and will possess ample skills to make them versatile employees. Nearly all labs have new, state-of-the-art equipment to provide the student with quality hands-on learning experiences.

This program is intended to prepare students for employment in electronic industries or for transfer into electronic and computer engineering technology or industrial technology programs at various universities in the CSU system. Many of the courses directly articulate to industrial technology programs at various universities in the CSU system. In determining eligibility, consideration will be given to courses offered at the CSUs. Typical technician job classifications this program covers include field service technician, field engineer, computer service technician, customer service technician, communications technician, maintenance technician and electronics technician.

Three certificate programs are also available, an 8-10 unit certificate in Electronics Assembly and Fabrication, a one-year certificate in Electronics Technology, and a two-year certificate with the same title as the A.S. Degree. All students completing an Electronic A.S. Degree must pass a criminal background check. Upon successful completion of the required courses, students are granted a certificate documenting completion of the Paramedic Program. Students are then eligible for licensure by taking and passing both the National Registry Exam and County Paramedic accreditation exams.

**Emergency Medical Services Medical Services Department Major 21210**

Students who complete the required courses listed below for the Emergency Medical Technician-Paramedic (EMT-P) Certificate and who also complete the graduation requirements of Mt. San Antonio College will be awarded the Associate in Science Degree in Emergency Medical Services.

This Paramedic Program is accredited by CAAHEP (Committee on Accreditation of Allied Health Education Programs) and approved by the Los Angeles County Department of Health Services as meeting and exceeding the standards for admission, applicants must be in good standing and satisfy the following requirements:

1. Be an EMT-I, currently certified in California.
2. Submit a letter on official stationery from a school providing EMT-I, Fire Science, and other training to the Technology and Health Division Office.
3. File a college application and be accepted as a student at Mt. San Antonio College.
4. Submit an application for the Paramedic Program to the Technology and Health Division Office (909)594-5611, Ext. 4750. All applications are dated upon receipt in the Technology and Health Division Office. The Paramedic Program begins three times per year, in August, January, and May and runs for 29 weeks.
5. Take the AWE (Assessment of Written English), the Mt. SAC Math Placement test, and the Degrees of Reading Power reading test at least ten working days before the state of the pre-course (EMS 1). Placement examinations will be individually assessed to determine eligibility. The placement test is administered by the Assessment Center, located in the Student Services Center. If required, arrange with the Center a day and a time to take the examination. The Assessment Center (909)594-5611 Ext. 4265, is open Monday through Friday.
7. Forward two official transcripts of all coursework completed (high school, EMT-I, Fire Science, and other than Mt. San Antonio College courses.) One transcript must be sent to the Technology and Health Division Office, the other to the Admissions and Records Office.

NOTE: If the course(s) were taken and/or the degree obtained at Mt. San Antonio College, it is not necessary to request transcripts. Indicate in the mailing address the program for which transcripts are being sent to the Technology and Health Division Office. EXAMPLE: Mt. San Antonio College Technology and Health Division Paramedic Program 1100 North Grand Avenue Walnut, CA 91789-1399.

8. A physical examination, proof of certain immunizations, and a criminal background check are required of all candidates after acceptance to the program and before entrance into the clinical setting. Forms and information will be provided upon acceptance into the program. In addition, drug testing may be required as part of the physical examination and/or requested by the college or one of its agents.

**Entrance Procedure:**

In determining eligibility, consideration will be given to the following:

1. Completion of all admission requirements
2. Submit all required documentation to the Technology and Health Division Office.
3. Successful completion of the required courses.
4. File a college application and be accepted as a student at Mt. San Antonio College.
5. Submit an application for the Paramedic Program to the Technology and Health Division Office (909)594-5611, Ext. 4750. All applications are dated upon receipt in the Technology and Health Division Office. The Paramedic Program begins three times per year, in August, January, and May and runs for 29 weeks.
6. Take the AWE (Assessment of Written English), the Mt. SAC Math Placement test, and the Degrees of Reading Power reading test at least ten working days before the state of the pre-course (EMS 1). Placement examinations will be individually assessed to determine eligibility. The placement test is administered by the Assessment Center, located in the Student Services Center. If required, arrange with the Center a day and a time to take the examination. The Assessment Center (909)594-5611 Ext. 4265, is open Monday through Friday.
7. Successful completion of EMS-1, Fundamentals for Paramedics.
8. Forward two official transcripts of all coursework completed (high school, EMT-I, Fire Science, and other than Mt. San Antonio College courses.) One transcript must be sent to the Technology and Health Division Office, the other to the Admissions and Records Office.
9. NOTE: If the course(s) were taken and/or the degree obtained at Mt. San Antonio College, it is not necessary to request transcripts. Indicate in the mailing address the program for which transcripts are being sent to the Technology and Health Division Office. EXAMPLE: Mt. San Antonio College Technology and Health Division Paramedic Program 1100 North Grand Avenue Walnut, CA 91789-1399.

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**Entrance Procedure:**

In determining eligibility, consideration will be given to the following:

1. Completion of all admission requirements
2) EMS-related experience
3) Scores on the English assessment and math placement tests
4) Placement EMS-1, Fundamentals for Paramedics, and scores on college placement exam for English and math. All Applicants are required to meet the Essential Functions for Success in the Paramedic Program.

Physical Demands:
- Perform prolonged, extensive, or considerable standing/walking, lifting, positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability for extremely heavy effort (lift and carry at least 125 pounds)
- Perform considerable reaching, stooping, bending, kneeling and crouching

Sensory Demands:
- **Color vision:** ability to distinguish and identify colors (may be corrected with adaptive devices)
- **Distance vision:** ability to see clearly 20 feet or more
- **Depth perception:** ability to judge distance and space relationships
- **Near vision:** ability to see clearly 20 inches or less
- **Hearing:** able to recognize a full range of tones

Working Environment:
- **May be exposed to infectious and contagious disease, without prior notification**
- **Regularly exposed to the risk of blood borne diseases**
- **Exposed to hazardous agents, body fluids and wastes**
- **Exposed to odorous chemicals and specimens**
- **Subject to hazards of flammable, explosive gases**
- **Subject to burns and cuts**
- **Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances**
- **Handle emergency or crisis situations**
- **Subject to many interruptions**
- **Requires decisions/actions related to end of life issues**
- **Exposed to products containing latex**

### Engineering Design Technology
**Architecture and Engineering Design Department**

**Major 20913**

This curriculum is recommended for those who wish to become an engineering technician, CAD operator/designer or drafter in fields related to engineering, tool design, electronics, manufacturing, structural steel, civil, piping, aerospace, 3-D modeling, illustration, and computer animation. It provides fundamental knowledge of manufacturing processes as they relate to design problems and the techniques required by industry for design, presentation, detail, and assembly working drawings.

This program is intended to prepare students for employment following completion of courses or for retaining and upgrading skills. This program also offers transfer opportunities in related majors. Students desiring a Bachelor’s Degree (transfer program) should consult with department faculty and a counselor or advisor to develop an individualized plan of transferable courses and math requirements.

### Requirements for the Major

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDT 11</td>
<td>Technical Engineering Drawing I</td>
<td>3.0</td>
</tr>
<tr>
<td>EDT 12</td>
<td>Technical Engineering Drawing II</td>
<td>3.0</td>
</tr>
<tr>
<td>EDT 14</td>
<td>Mechanical Design</td>
<td>3.0</td>
</tr>
<tr>
<td>EDT 15</td>
<td>Geometric Dimensioning and Tolerancing</td>
<td>4.0</td>
</tr>
<tr>
<td>EDT 16</td>
<td>Basic CAD and Computer Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>EDT 18</td>
<td>Engineering CAD Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>EDT 20</td>
<td>Technical Descriptive Geometry</td>
<td>3.0</td>
</tr>
<tr>
<td>EDT 24</td>
<td>Engineering CAD 3-D Solids and Surfaces</td>
<td>3.0</td>
</tr>
<tr>
<td>EDT 26</td>
<td>Civil Engineering Technology and CAD</td>
<td>3.0</td>
</tr>
<tr>
<td>EDT 28</td>
<td>Engineering CAD 3-D Illustration/Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>ELEC 50A</td>
<td>Electronic Circuits (DC)</td>
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<tr>
<td>ELEC 50B</td>
<td>Electronic Circuits (AC)</td>
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</tr>
<tr>
<td>MFG 11</td>
<td>Manufacturing Processes I</td>
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</tr>
<tr>
<td><strong>Total Units</strong></td>
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<td><strong>39.0</strong></td>
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**Recommended Electives:***

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 8</td>
<td>Engineering Design Technology</td>
<td></td>
</tr>
<tr>
<td>ENGR 9</td>
<td>Engineering Design Technology - Work Experience</td>
<td></td>
</tr>
</tbody>
</table>

**Equipment Technology**

**Agricultural Sciences Department**

**Major 20118**

The courses in equipment technology are designed to enable students to prepare for a career in this essential and diverse profession. This degree is part of our comprehensive Agricultural Sciences program. Our program is unique in that most courses provide hands-on experience and are designed to give the student a combination of practical skills and technical knowledge. Students who intend to transfer should meet with a counselor or advisor to check the lower division requirements in the catalog of the college or university which they will attend and also the semester and year in which courses are offered.

This program is intended to prepare students to become technicians for entry level positions or skills enhancement in the operation, service, maintenance and repair of industrial and agricultural power equipment.

Listed below are the courses needed to satisfy major requirements. It is recommended that students consult with the department chairperson, counselor or advisor to file an educational plan. For additional information, call the Agricultural Sciences Department, ext. 4540 or visit the Mt. SAC Web site at www.mtdac.edu/instruction/science/agriculture.

### Requirements for the Major

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGAG 1</td>
<td>Food Production, Land Use and Politics - A Global Perspective</td>
<td>3.0</td>
</tr>
<tr>
<td>AGAG 59</td>
<td>Work Experience in Agriculture</td>
<td>1.0</td>
</tr>
<tr>
<td>AGAG 60</td>
<td>Work Experience in Agriculture</td>
<td>2.0</td>
</tr>
<tr>
<td>AGAG 61</td>
<td>Work Experience in Agriculture</td>
<td>3.0</td>
</tr>
<tr>
<td>AGAG 62</td>
<td>Work Experience in Agriculture</td>
<td>4.0</td>
</tr>
<tr>
<td>AGOR 51</td>
<td>Tractor and Landscape Equipment Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 52</td>
<td>Hydraulics</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 53</td>
<td>Small Engine Repair I</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 54</td>
<td>Small Engine Repair II</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 55</td>
<td>Diesel Engine Repair</td>
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<td>AGOR 56</td>
<td>Engine Diagnostics</td>
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<tr>
<td><strong>Total Units</strong></td>
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<td><strong>40.0</strong></td>
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**Recommended Electives:**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 7</td>
<td>Principles of Accounting - Financial</td>
<td>5.0</td>
</tr>
<tr>
<td>BUSA 75</td>
<td>Principles of Business</td>
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</tr>
<tr>
<td>BUSM 60</td>
<td>Human Relations in Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 66</td>
<td>Small Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 50</td>
<td>Real Estate Principles</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 51</td>
<td>Legal Aspects of Real Estate</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 53</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 76</td>
<td>Escrow Procedures I</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 77</td>
<td>Escrow Procedures II</td>
<td>3.0</td>
</tr>
<tr>
<td>CISB 15</td>
<td>Microcomputer Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 1</td>
<td>Computer Keyboarding</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>40.0</strong></td>
</tr>
</tbody>
</table>

**Programs Leading to an Associates Degree**

**Escrow Management**

**Business Administration Department**

**Major 20511**

This program is intended to prepare students for employment following graduation. Students wishing a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 7</td>
<td>Principles of Accounting - Managerial</td>
<td>5.0</td>
</tr>
<tr>
<td>BUSL 18</td>
<td>Business Law</td>
<td></td>
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<tr>
<td>BUSL 18H</td>
<td>Business Law - Honors</td>
<td></td>
</tr>
<tr>
<td>BUSM 62</td>
<td>Human Resource Management</td>
<td></td>
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<tr>
<td>BUSO 5</td>
<td>Business English</td>
<td></td>
</tr>
<tr>
<td>BUSR 52</td>
<td>Real Estate Practice</td>
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<tr>
<td>BUSR 52D</td>
<td>Real Estate Practice Work Experience</td>
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<td>BUSR 57</td>
<td>Income Tax Aspects of Real Estate Investments</td>
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<td>PSYC 1A</td>
<td>Introduction to Psychology</td>
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<tr>
<td>PSYC 1AH</td>
<td>Introduction to Psychology - Honors</td>
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</tbody>
</table>

**Total Units 35.0 - 38.0**
Family and Consumer Sciences
Consumer Science and Design Technologies
Major 21309

This program provides students with the basic skills associated with the field of family and consumer sciences, which includes the needs of the home, the family, and its individual members. Students wishing a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major

Required courses:
- CHLD 10 Child Growth and Development 3.0 CSU,UC
- CHLD 10H Child Growth and Development Honors 3.0 CSU,UC
- FASH 10 Clothing Fundamentals 3.0 CSU
- FASH 15 Fashion Strategies 3.0 CSU
- FASH 17 Textiles 3.0 CSU,UC
- FCS 41 Life Management 3.0 CSU
- FCS 80 Financial Planning 3.0 CSU
- BUSA 71 Financial Planning 3.0 CSU
- ID 100 Fundamentals of Interior Design 3.0 CSU
- NF 20 Principles of Foods With Lab 3.0 CSU
- NF 62 Meal Management 3.0 CSU
- NF 25 Essentials of Nutrition 3.0 CSU,UC
- NF 25H Essentials of Nutrition Honors 3.0 CSU,UC
- NF 28 Cultural and Ethnic Foods 3.0 CSU,UC

Total Units 27.0

Recommended Electives:
- CHLD 1 Child, Family and Community
- FASH 12 Advanced Clothing
- ID 105 Interior Design Studio I
- ID 130 Applied Color and Design Theory

Fashion Design
Consumer Science and Design Technologies
Major 21320

Exploring employment opportunities are available in both fashion design and costume design. In Southern California, the apparel industry and the entertainment industry support the largest number of employees and contribute significantly to the economy of the region. Expand your creative talents with this challenging major and find a career of your dreams. Students desiring a Bachelor's Degree should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major

Required courses:
- FASH 8 Introduction to Fashion 3.0 CSU
- FASH 9 History of Costume and Fashion 3.0 CSU
- FASH 10 Clothing Construction I 3.0 CSU
- FASH 12 Clothing Construction II 3.0 CSU
- FASH 15 Fashion Strategies 3.0 CSU
- FASH 17 Textiles 3.0 CSU,UC
- FASH 20 Illustration for Fashion and Costume Design 3.0
- FASH 21 Patternmaking I 3.0 CSU
- FASH 22 Fashion Design By Draping 3.0
- FASH 23 Patternmaking II 3.0
- FASH 30 Fashion Design and Product Development I 3.0
- FASH 31 Fashion Design and Product Development II 3.0
- FASH 32 Fashion Design and Product Development III 3.0

Total Units 39.0

Recommended Electives:
- FASH 26 Fashion Computer Assisted Design
- FASH 81 Work Experience in Fashion
- FASH 82 Work Experience in Fashion
- FASH 83 Work Experience in Fashion
- FASH 90 Field Studies
- FASH 91 Field Studies - New York
- FASH 92 Field Studies - Fashion Capitals
- FCS 41 Life Management
- FCS 90 Family and Consumer Sciences
- FCS 91 Field Studies - Family and Consumer Sciences
- FCS 92 Work Experience in Family and Consumer Sciences
- FASH 90, FASH 91 and FASH 92 may be taken two times for credit.

Total Units 23.5 - 39.0
Fire Technology - Administration
Fire Technology Department
Major 22106
The Fire Science major has been developed to offer pre-employment education for the undergraduate who desires to enter the field of fire science. It also provides the employed firefighter an opportunity for a professional education. Students intending to pursue a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
- BUSA 7 Principles of Accounting 5.0 CSU,UC
- CSIS 11 Computer Information Systems 3.5 CSU,UC
- FIRE 1 Fire Protection Organization 3.0 CSU
- FIRE 6 Fire Company Organization and Management
- FIRE 20 Fire Instructor 1A 2.0
- FIRE 21 Fire Instructor 1B 2.0
Total Units 18.5

Recommended Electives:
- FIRE 2 Fire Prevention Technology
- FIRE 30 Fire Management 1
- SPAN 66 Spanish for Fire and Police Personnel

Fire Technology - Administrative Law
Fire Technology Department
Major 22108
The Fire Science major has been developed to offer pre-employment education for the undergraduate who desires to enter the field of fire science. It also provides the employed firefighter an opportunity for a professional education. Students intending to pursue a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
- BUSA 7 Principles of Accounting 5.0 CSU,UC
- CSIS 11 Computer Information Systems 3.5 CSU,UC
- FIRE 1 Fire Protection Organization 3.0 CSU
- FIRE 6 Fire Company Organization and Management
- FIRE 20 Fire Instructor 1A 2.0
- FIRE 21 Fire Instructor 1B 2.0
Total Units 20.5

Recommended Electives:
- FIRE 2 Fire Prevention Technology
- FIRE 40 Fire Prevention 1A
- FIRE 41 Fire Prevention 1B
- SPAN 66 Spanish for Fire and Police Personnel

Fire Technology - Fire Management
Fire Technology Department
Major 22109
The Fire Science major has been developed to offer pre-employment education for the undergraduate who desires to enter the field of fire science. It also provides the employed firefighter an opportunity for a professional education. Students intending to pursue a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
- FIRE 1 Fire Protection Organization 3.0 CSU
- FIRE 2 Fire Prevention Technology 3.0 CSU
- FIRE 3 Fire Protection Equipment and Systems 3.0 CSU
- FIRE 4 Building Construction for Fire Protection 3.0 CSU
- FIRE 5 Fire Behavior and Combustion 3.0 CSU
- FIRE 6 Hazardous Materials/ICS 3.0
- FIRE 8 Fire Company Organization and Management 3.0 CSU
- FIRE 40 Fire Prevention 1A 2.0
- FIRE 41 Fire Prevention 1B 2.0
Total Units 35.0

Recommended Electives:
- EMT 90 Emergency Medical Technician I
- FIRE 10 Arson and Fire Investigation 3.0 CSU
- FIRE 20 Fire Instructor 1A 2.0
- FIRE 21 Fire Instructor 1B 2.0
- FIRE 30 Fire Management 1 2.0
- FIRE 50 Fire Command 1A 2.0
- SPAN 66 Spanish for Fire and Police Personnel

Fire Technology - Fire Prevention
Fire Technology Department
Major 22110
The Fire Science major has been developed to offer pre-employment education for the undergraduate who desires to enter the field of fire science. It also provides the employed firefighter an opportunity for a professional education. Students intending to pursue a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
- FIRE 1 Fire Protection Organization 3.0 CSU
- FIRE 2 Fire Prevention Technology 3.0 CSU
- FIRE 3 Fire Protection Equipment and Systems 3.0 CSU
- FIRE 4 Building Construction for Fire Protection 3.0 CSU
- FIRE 5 Fire Behavior and Combustion 3.0 CSU
- FIRE 6 Hazardous Materials/ICS 3.0
- FIRE 7 Fire Fighting Tactics and Strategy 3.0 CSU
- FIRE 8 Fire Company Organization and Management 3.0 CSU
- FIRE 10 Arson and Fire Investigation 3.0 CSU
- FIRE 20 Fire Instructor 1A 2.0
- FIRE 21 Fire Instructor 1B 2.0
- FIRE 30 Fire Management 1 2.0
- FIRE 50 Fire Command 1A 2.0
- SPAN 66 Spanish for Fire and Police Personnel

- Total Units 34.0

Recommended Electives:
- EMT 90 Emergency Medical Technician I
- FIRE 10 Arson and Fire Investigation 3.0 CSU
- FIRE 20 Fire Instructor 1A 2.0
- FIRE 21 Fire Instructor 1B 2.0
- FIRE 30 Fire Management 1 2.0
- FIRE 50 Fire Command 1A 2.0
- SPAN 66 Spanish for Fire and Police Personnel

Fire Technology - Fire Training
Fire Technology Department
Major 22111
The Fire Science major has been developed to offer pre-employment education for the undergraduate who desires to enter the field of fire science. It also provides the employed firefighter an opportunity for a professional education. Students intending to pursue a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
- FIRE 1 Fire Protection Organization 3.0 CSU
- FIRE 2 Fire Prevention Technology 3.0 CSU
- FIRE 3 Fire Protection Equipment and Systems 3.0 CSU
- FIRE 4 Building Construction for Fire Protection 3.0 CSU
- FIRE 5 Fire Behavior and Combustion 3.0 CSU
- FIRE 6 Hazardous Materials/ICS 3.0
- FIRE 7 Fire Fighting Tactics and Strategy 3.0 CSU
- FIRE 8 Fire Company Organization and Management 3.0 CSU
- FIRE 10 Arson and Fire Investigation 3.0 CSU
- FIRE 20 Fire Instructor 1A 2.0
- FIRE 21 Fire Instructor 1B 2.0
- FIRE 30 Fire Management 1 2.0
- FIRE 50 Fire Command 1A 2.0
- SPAN 66 Spanish for Fire and Police Personnel

- Total Units 34.0

Recommended Electives:
- EMT 90 Emergency Medical Technician I
- FIRE 10 Arson and Fire Investigation 3.0 CSU
- FIRE 20 Fire Instructor 1A 2.0
- FIRE 21 Fire Instructor 1B 2.0
- FIRE 30 Fire Management 1 2.0
- FIRE 50 Fire Command 1A 2.0
- SPAN 66 Spanish for Fire and Police Personnel

- Total Units 34.0
Programs Leading to an Associates Degree

FIRE 6 Hazardous Materials/KCS 3.0
FIRE 7 Fire Fighting Tactics and Strategy 3.0 CSU
FIRE 20 Fire Instructor 1A 2.0
FIRE 21 Fire Instructor 1B 2.0
FIRE 22 Fire Instructor 2a 2.0
FIRE 23 Fire Instructor 2b 2.0
FIRE 24 Fire Instructor 2c 2.0
FIRE 30 Fire Management 1 2.0
Total Units 33.0

Recommended Electives:
EMT 90 Emergency Medical Technician I
FIRE 8 Fire Company Organization and Management
FIRE 40 Fire Prevention 1A
FIRE 41 Fire Prevention 1B
FIRE 50 Fire Command 1A
FIRE 51 Fire Command 1B
PE-F 50 Physical Skills Preparation for Law Enforcement and Fire Science
PE-F 51 Agility Testing Preparation for Law Enforcement and Fire Science
SPAN 66 Spanish for Fire and Police Personnel

Floral Design
Agricultural Sciences Department
Major 20113

The courses in floral design are designed to enable students to prepare for a career in this essential and diverse profession. The department offers a comprehensive agricultural sciences program which is unique in that most courses provide hands-on experience designed to give the student a combination of practical skills and technical knowledge. Students who intend to transfer should check the lower division requirements in the catalog of the college or university which they will attend and also the semester and year in which courses are offered.

Listed below are the courses needed to satisfy major requirements. Students may obtain certificates upon completion of required courses. It is recommended that all students consult with the department chairperson or faculty advisor to file an educational plan.

Requirements for the Major
Required courses:
FIRE 11 Fire Apparatus and Equipment 3.0 CSU
FIRE 40 Fire Prevention 1A 2.0
FIRE 41 Fire Prevention 1B 2.0
FIRE 42 Fire Prevention 1C 2.0
Total Units 30.0

Recommended Electives:
EMT 90 Emergency Medical Technician I
FIRE 10 Arson and Fire Investigation
FIRE 30 Fire Management 1
FIRE 60 Fire Investigation 1A
FIRE 61 Fire Investigation 1B
PE-F 50 Physical Skills Preparation for Law Enforcement and Fire Science
PE-F 51 Agility Testing Preparation for Law Enforcement and Fire Science
PE-F 52 Fitness and Conditioning for Law Enforcement, Fire Science and Forestry
SPAN 66 Spanish for Fire and Police Personnel

Histologic Technician Training
Biological Sciences Department
Major 21211

This program provides on-campus and on-site technical training in the fields of histotechnology, focusing on routine tissue sample preparation, special stains and techniques such as immunohistochemistry, and in situ hybridization. Training on campus will utilize samples routinely prepared in both clinical and research facilities. As part of their formal training, students of histotechnology will work through study guides provided by the American Society of Clinical Pathologists (ASCP) for its certification examination. Partnerships with local facilities will allow for work experience and internship sites, required for certification of histotechnology graduates, and will provide further training for those interested in research and/or careers in the private sector.

Requirements for the Major
Required courses:
AGAG 1 Food Production, Land Use - A Global Perspective 3.0 CSU,UC
AGOR 1 Horticultural Science 3.0 CSU
AGOR 2 Plant Propagation/Quality Improvement 3.0 CSU
AGOR 3 Landscape Design 3.0 CSU
AGOR 5 Interior Landscaping 3.0 CSU
AGOR 6 Floral Design I 3.0 CSU
AGOR 7 Floral Design II 3.0 CSU
AGOR 29 Ornamental Plants - Herbaceous 3.0 CSU,UC
AGOR 30 Ornamental Plants - Trees and Woody Shrubs 3.0 CSU,UC
AGOR 32 Landscaping and Nursery Management 3.0 CSU
AGOR 91 Work Experience in Nursery Operations or 1.0
AGOR 92 Work Experience in Nursery Operations or 2.0
AGOR 93 Work Experience in Nursery Operations or 3.0
AGOR 94 Work Experience in Nursery Operations or 4.0
CISB 15 Microcomputer Applications 4.0 CSU,UC
Total Units 42.0

General Business
Accounting and Management Department
Major 20501

This program is intended to prepare students for employment following graduation. Students wishing a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
BUSM 10 Principles of Continuous Quality Improvement 3.0
BUSM 20 Principles of Business 3.0 CSU,UC
BUSM 60 Human Relations in Business 3.0 CSU
BUSM 61 Business Organization and Management 3.0 CSU
BUSM 62 Human Resource Management 3.0
BUSO 5 Business English 3.0
BUSO 25 Business Communications 3.0 CSU
BUSO 36 Principles of Marketing 3.0 CSU
CSB 15 Microcomputer Applications 4.0 CSU,UC
PLUS Select six (6) units from:
BUSA Business: Accounting 1.0 - 5.0 CSU,UC
BUSC Business: Economics 3.0 CSU
BUSL Business: Law 1.0 - 3.0 CSU,UC
BUSM Business: Management 1.0 - 4.0 CSU,UC
BUSS Business: Sales, Merchandising and Marketing 1.0 - 4.0 CSU
CSB Computer Information Systems: Beginning 2.0 - 4.0 CSU,UC
COMP Computer Applications 0.5 - 4.0 CSU
Total Units 42.0
These programs are intended to prepare students for employment following graduation. Students desiring a Bachelor's Degree (transfer program) should consult with the department chairperson or counselor or advisor to discuss transferability of courses. The curriculum is flexible in nature to allow for previous experience and specialization in a given area of agriculture and agricultural business.

**Requirements for the Major**

**Required courses:**
- AGAB 20 Microcomputer Applications 3.0 CSU,UC in Agriculture
- AGAG 59 Work Experience in Agriculture 1.0
- AGAG 60 Work Experience in Agriculture 2.0
- AGAG 61 Work Experience in Agriculture 3.0
- AGAG 62 Work Experience in Agriculture 4.0
- AGAM 94 Animal Breeding 3.0
- AGLI 16 Horse Production 4.0 CSU,UC
- AGLI 18 Horse Ranch Management 4.0 CSU
- AGLI 19 Horse Hoof Care 2.0 CSU
- AGLI 20 Horse Behavior and Training 2.0
- AGLI 96 Animal Sanitation and Disease Control 3.0 CSU
- AGLI 97 Artificial Insemination of Livestock 2.0

Additional courses:
- AGHE 84A Applied Animal Health Procedures 1.0
- AGOR 53 Small Engine Repair I 3.0 CSU
- AGOR 71 Landscape Construction 3.0 CSU
- BUSM 20 Principles of Business 3.0 CSU,UC
- BUSM 66 Small Business Management 3.0 CSU

**Total Units** 40.0 - 43.0

**Hospitality and Restaurant Management**

**Consumer Science and Design Technologies**

**Major 21307**

This program provides students with an excellent background for a career in the hospitality and restaurant management industry. Students will have the education necessary for many entry-level positions. Students may wish to pursue a Certificate in Hospitality Management, Restaurant Management, Food Services, or Catering. This program is designed to articulate with the Collins School of Hospitality Management at Cal Poly Pomona, as well as other universities. (Note: HRM 65 is a required course in the Cal Poly program.) Students wishing to transfer should consult with Hospitality and Restaurant Management faculty or counselor or advisor to discuss transfer options.

**Requirements for the Major**

**Required courses:**
- HRM 61 Menu Planning 3.0 CSU
- HRM 62 Catering 3.0 CSU
- HRM 91 Work Experience in Restaurant/Hospitality 3.0 CSU in Restaurant/Hospitality
- HRM 92 Work Experience in Restaurant/Hospitality 3.0 CSU
- HRM 93 Work Experience in Restaurant/Hospitality 3.0 CSU
- HRM 94 Work Experience in Restaurant/Hospitality 3.0 CSU

**Recommended Electives:**
- HRM 63 Hospitality Planning 3.0 CSU
- HRM 64 Hospitality Law 3.0 CSU
- HRM 65 Financial Management 3.0 CSU
- HRM 66 Hospitality Law 3.0 CSU
- HRM 67 Management of Hospitality Personnel and Operations 3.0 CSU
- HRM 68 Hospitality Cost Control 3.0 CSU
- HRM 69 Financial Accounting I 3.0 CSU
- HRM 70 Introduction to Lodging 3.0 CSU

**Total Units** 24.0

**Human Resource Management**

**Accounting and Management Department**

**Major 20530**

The Human Resource Management Degree is intended to prepare students to enter the business world in the dynamic environment of human resources. Students become familiar with various approaches to business organization and the strategic nature of human resource management. Studies in human resource law, compensation systems, training, and development will provide the student with a solid foundation from which to build a career in human resource management. Transfer students will gain a strong human resource management business elective base initiating further study in a variety of fields. Students active in the work arena will acquire new skills that are highly desirable in a fast-paced work force.

**Requirements for the Major**

**Required courses:**
- BUSM 20 Principles of Business 3.0 CSU
- BUSM 60 Human Relations in Business 3.0 CSU
- BUSM 61 Business Organization 3.0 CSU
- BUSM 62 Human Resource Management 3.0
- BUSM 63 Business Communications 3.0 CSU
- BUSO 25 Microcomputer Applications 4.0 CSU

**Total Units** 28.0

**Interior Design**

**Consumer Science and Design Technologies**

**Major 21301**

The program is available as a Certificate (Interiors Merchandising), as an A.S. Degree Interior Design Assistant, and/or when combined with a Bachelor's Degree qualifies student for Professional Designation in Interior Design (Professional Interior Designer) (see below). Students desiring a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

The Interior Design program works within a Regional Interior Design Program of nearby community colleges. Many of the required courses may also be offered at the following community colleges and will meet the requirements of the Mt.SAC program: Fullerton, Long Beach City, Orange Coast, and Saddleback. Regional course numbers all have an ID (Interior Design) prefix. Some Mt. San Antonio College courses are offered by other departments and are identified by Mt. San Antonio College prefixes and numbers. These courses have the regional ID course number in parenthesis following their course title.

**Requirements for the Major**

**Required courses:**
- BUSM 20 Principles of Business 3.0 CSU
- BUSM 60 Human Relations in Business 3.0 CSU
- BUSM 61 Business Organization 3.0 CSU
- BUSM 62 Human Resource Management 3.0
- BUSM 63 Business Communications 3.0 CSU
- BUSO 25 Microcomputer Applications 4.0 CSU

**Total Units** 28.0

**Programs Leading to an Associates Degree**

**To An Associates Degree**
Programs Leading to an Associates Degree

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<th>ID</th>
<th>Course</th>
<th>Units</th>
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<td>Interior Design Careers</td>
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<tr>
<td>130</td>
<td>Applied Color and Design Theory</td>
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<td>Interior Materials and Products</td>
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<td>170</td>
<td>Space Planning</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>180</td>
<td>History of Interior Architecture &amp; Furnishings</td>
<td>3.0</td>
<td>CSU</td>
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<tr>
<td>190</td>
<td>History of Interior Architecture &amp; Furnishings 1</td>
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<tr>
<td>210</td>
<td>Fundamentals of Lighting</td>
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<td>Interior Design Studio II</td>
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<td>Business and Professional Practice</td>
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<td>Interior Design Internship</td>
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<td>Interior Design Studio III - Kitchens</td>
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<td>Construction Estimating</td>
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<td>Space Planning</td>
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<tr>
<td>70</td>
<td>Elements of Construction</td>
<td>3.0</td>
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<td>BUSM 51</td>
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<td>BUSM 52</td>
<td>Principles of Exporting and Importing</td>
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<td>BUSM 61</td>
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<td>BUSM 70</td>
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<td>4.0</td>
<td>CSU,UC</td>
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<td>Elementary Japanese</td>
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<td>CSU,UC</td>
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<tr>
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<td>27.0 - 28.0</td>
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Recommended Electives:
- ARCH 23 - Architectural Illustration
- ARCH 23 - Architectural Presentations
- BUSA 72 - Bookkeeping - Accounting
- FCS 41 - Life Management

International Business Accounting and Management Department Major 20507

This program is intended to prepare students for employment following graduation. Students wishing a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferrability of courses.

Required courses:
- BUSL 20 - International Business Law
- BUSM 20 - Principles of Business
- BUSM 50 - World Culture: A Business Perspective

PLUS Select four (4) courses from:
- ADJU 6 - Concepts of Enforcement Services
- ADJU 13 - Concepts of Traffic Services
- ADJU 20 - Principles of Investigation
- ADJU 38 - Narcotics Investigation
- ADJU 59 - Gangs in the Community/Corrections
- ADJU 74 - Vice Control
- CORS 30 - Ethnic Relations in Corrections
- CORS 40 - Crime and Delinquency
- CORS 45 - The Violent Offender

Total Units: 30.0

Recommended Electives:
- BUSM 81 - Work Experience in Business
- BUSM 82 - Work Experience in Business
- BUSM 83 - Work Experience in Business
- BUSM 84 - Work Experience in Business
- BUSM 85 - Special Issues in Business
- BUSM 86 - Special Issues in Marketing

Law Enforcement Public Services Department Major 22102

This program is intended to prepare students for employment following graduation. Students desiring a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferrability of courses.

Requirements for the Major

Required courses:
- ADJU 1 - The Administration of Justice System
- ADJU 2 - Principles and Procedures of the Justice System
- ADJU 3 - Concepts of Criminal Law
- ADJU 4 - Legal Aspects of Evidence
- ADJU 5 - Community Relations
- ADJU 58 - Administration of Justice Report Writing

PLUS Select four (4) courses from:
- ADJU 6 - Concepts of Enforcement Services
- ADJU 13 - Concepts of Traffic Services
- ADJU 20 - Principles of Investigation
- ADJU 38 - Narcotics Investigation
- ADJU 59 - Gangs in the Community/Corrections
- ADJU 74 - Vice Control
- CORS 30 - Ethnic Relations in Corrections
- CORS 40 - Crime and Delinquency
- CORS 45 - The Violent Offender

Total Units: 30.0

Recommended Electives:
- PE-F 50 - Physical Skills Preparation for Law Enforcement and Fire Science
- PE-F 51 - Agility Testing Preparation for Law Enforcement and Fire Science
- PE-F 52 - Fitness and Conditioning for Law Enforcement, Fire Science and Forestry
- SPAN 66 - Spanish for Fire and Police Personnel

Licensed Vocational Nurse to RN Nursing Department Major 21201

The Mt. San Antonio College Nursing Program, approved and accredited by the California Board of Registered Nursing, is a two-year program designed to prepare men and women to give direct nursing care to clients in various practice settings. The program consists of course work in nursing, science, general education and clinical nursing practice at local hospitals and health agencies.

Graduates of the program receive an Associate in Science Degree in Nursing and are eligible to take the NCLEX-RN examination leading to licensure as a Registered Nurse.

The Licensed Vocational Nurse is provided career mobility in the Nursing Program. The Licensed Vocational Nurse may choose between earning an Associate in Science Degree in Nursing or completing the LVN 30-Unit Option track which leads to a certificate, not a degree.

PREREQUISITE COURSES 1. Human Anatomy, including a laboratory component, a minimum of four semester units.
2. Human Physiology, including a laboratory component, a minimum of four semester units.
3. Microbiology, including a laboratory component, a minimum of four semester units.
4. English 1A (Writing Composition) minimum of three (3) semester units with a minimum grade of C. 5. PSYC 1A Introduction to Psychology.

Revised: 9/22/05

2008-09 Mt. San Antonio College Catalog
10 Child Growth and Development or PSYC 14
Developmental Psychology

Non-course requirements: 1. An overall grade point average of 2.5 for the Human Anatomy, grade Human Physiology, and Microbiology prerequisite courses with no grade less than a "C" for each course and no more than one repetition of any one of these courses. 2. A cumulative grade point average (GPA) of 2.5 for all college coursework completed. 3. Eligibility for Math 51 or High school graduation or GED or academic degree from an accredited college/university in the United States. 4. Possess the ability to perform fine motor movements or possess the ability for extremely heavy effort.

Hearing:
Requires decisions/actions related to end of life issues

Subject to hazards of flammable, explosive gases

Depth perception:
Ability to see clearly 20 inches or less

Students completing college coursework outside of the United will need to have their transcripts evaluated by an approved national transcript evaluation agency and must bring the final evaluation to their appointment (students may be eligible to obtain a list of agencies from the Admissions Office).

a) Due to specific deadlines for International Student applications, please inform the Counseling/Educational Advisor that this applies to you.

b) All students will need to bring official proof of high school graduation, GED, or college graduation from an accredited institution in the United States.

Students should also be aware that once they have been admitted to the Nursing program and before beginning the clinical portion of the program, they will need to be able to pass both a criminal background check, including a screening by the Office of Inspector General for welfare or Social Security fraud, as well as testing negative for drug use.

All applicants are required to meet the essential functions for success in the nursing program.

Physical Demands:
- Perform prolonged, extensive, or considerable standing/walking, lifting positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability for extremely heavy effort (lift/carry 50 lbs. or more)
- Perform considerable reaching, stooping, bending, kneeling, and crouching.

Sensory Demands:
- Color vision: ability to distinguish and identify colors (may be corrected with adaptive devices).
- Distance vision: ability to see clearly 20 feet or more
- Depth perception: ability to judge distance and space relationships
- Near vision: ability to see clearly 20 inches or less
- Hearing: ability to recognize a full range of tones

Working Environment:
- May be exposed to infectious and contagious disease, without prior notification
- Regularly exposed to the risk of blood borne diseases
- Exposed to hazardous agents, body fluids and wastes
- Exposed to odorous chemicals and specimens
- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity, race sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end of life issues
- Exposed to products containing latex

English Language Skills:
Although proficiency in English is not a criteria for admission into the nursing program, students are encouraged to be able to speak, write and read English to complete classes successfully and to ensure safety for themselves and others.
Programs Leading to an Associates Degree

Manufacturing Technology
Aircraft Maintenance Tech & Manufacturing Dept.
Major 20918

This program is designed to prepare the student for employment following graduation. Students wishing a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
AGAB 20 Microcomputer Applications in Agriculture 3.0 CSU,UC
AGAG 1 Food Production, Land Use and Politics - A Global Perspective 3.0 CSU,UC
AGAG 60 Work Experience in Agriculture 1.0
AGAG 61 Work Experience in Agriculture 2.0
AGAG 62 Work Experience in Agriculture 3.0
AGAN 1 Animal Science 3.0 CSU,UC
AGAN 2 Animal Nutrition 3.0 CSU
AGAN 94 Animal Breeding 3.0
AGLI 14 Swine Production 3.0 CSU
AGLI 16 Horse Production 4.0 CSU,UC
AGLI 17 Sheep Production 3.0 CSU
AGLI 30 Beef Production 3.0 CSU
AGLI 34 Livestock Judging and Selection 2.0 CSU,UC
AGLI 96 Animal Sanitation and Disease Control 3.0 CSU
AGOR 53 Small Engine Repair 1 3.0 CSU
AGOR 71 Landscape Construction Fundamentals 3.0 CSU
BUSM 20 Principles of Business 3.0 CSU,UC
BUSM 25 Business Communications 2.0 CSU
BUSM 35 Professional Selling 3.0 CSU
BUSS 36 Principles of Marketing 3.0 CSU

Total Units 43.0 - 46.0

Marketing Management
Business Administration Department
Major 20510

This program is intended to prepare students for employment following graduation. Students wishing a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
BUSC 1A Principles of Economics 3.0 CSU,UC
BUSC 1AH Principles of Economics 3.0 CSU,UC
BUSC 1B Principles of Economics 3.0 CSU,UC
BUSC 1BH Principles of Economics 3.0 CSU,UC
BUSS 35 Principles of Business 3.0 CSU
BUSS 36 Principles of Business 3.0 CSU
BUSS 70 International Marketing Concepts 3.0
CISB 15 Microcomputer Applications 4.0 CSU,UC

PLUS Select one (1) course from:
BUSS 35 Principles of Business 3.0 CSU
BUSS 36 Principles of Business 3.0 CSU
BUSS 70 International Marketing Concepts 3.0
CISB 15 Microcomputer Applications 4.0 CSU,UC

Total Units 32.0

Mental Health Technology - Psychiatric Technician
Psychiatric Technician Department
Major 21208

Completion of coursework leads to an Associate in Science Degree. The Psychiatric Technology Program will prepare students to take the California State Licensure Examination for Psychiatric Technicians.

Requirements for the Major
Required courses:
MENT 40 Introduction to Interviewing and Counseling 3.0
MENT 56 Medical - Surgical Nursing for Psychiatric Technicians Clinical Experience 9.0
MENT 580 Advanced Medical - Surgical Nursing for Psychiatric Technicians Clinical Experience 4.0
MENT 670 Introduction to Psychiatric Technology 1.5
MENT 72L Nursing Care of the Developmentally Disabled Person 7.0
MENT 72S Nursing Care of the Developmentally Disabled Person - Clinical 5.0
MENT 73L Psychiatric Nursing for Psychiatric Technicians 5.0
MENT 82 Work Experience in Mental Health Technology 2.0
PSYC 1A Introduction to Psychology 3.0 CSU,UC

Total Units 53.0

Special Information
Additional general education courses needed for completion of the Associate in Science Degree requirements are listed in the Mt. San Antonio College Catalog, but are not required to qualify the student for the California State Board Examination. To remain in the program, students must maintain a "C" or better grade in all courses. The student will qualify to take the California State Board Examination upon completion of all of the above courses, except MENT 82.

Entrance Requirements
In addition to meeting Mt. San Antonio College's academic standards for admission, applicants must be in good standing and satisfy the following requirements:

a) Be a high school graduate or equivalent. (All students who have taken coursework outside of the United States must have their transcript evaluated. Foreign transcripts will not be accepted without the evaluation.)
c) File a college application and be accepted as a student at Mt. San Antonio College.

d) Submit an application for the Mental Health/Psychiatric Technician Program to the Technology and Health Division Office (909) 594-5611, Ext. 4750. All applications are dated upon receipt in the Technology and Health Division Office. A program begins each fall and spring semester.

e) Take the required English Placement Test (AWA). Eligibility for ENGL 60 is advised.

If you have already taken a college placement exam within the past two years at another school, arrange to have your test scores forwarded to the Technology and Health Division Office. (If you were tested at Mt. San Antonio College, the office will obtain the test scores as long as an "Application for Admission" is on file with the Admissions and Records Office.) Testing is administered by the Assessment Center, located in the Student Services Center. Arrangements should be made with them to schedule a day and time to take the English Placement Test, if required. The Assessment Center is open Monday through Friday. You may contact them at (909) 594-5611, Ext. 4265.

f) Forward two official transcripts of all coursework completed (high school, nursing school, and other than Mt. San Antonio College courses). One transcript must be sent to the Technology and Health Division Office and the other to the Admissions and Records Office.

g) For students who possess a college degree, the English Placement Test is not required. However, it will be necessary for a student to obtain two official copies of the college transcript showing the degree issued. One transcript must be sent to the Technology and Health Division Office and the other to the Admissions and Records Office.

NOTE: Concerning Entrance Requirements 'C' and 'D', if the course(s) were taken and/or the degree obtained at Mt. San Antonio College, it is not necessary to request transcripts. Indicate in the mailing address the program for which your transcript is being sent to the Technology and Health Division Office.

EXAMPLE: Mt. San Antonio College Technology and Health Division Psychiatric Technician Program 1100 North Grand Avenue Walnut, CA 91789-1399

h) A physical examination, including specific immunizations, and consent/disclaimer for Hepatitis A/B vaccine is required of all candidates prior to beginning classes. Students must provide proof that he/she does not have Tuberculosis. These requirements are in accordance with the healthcare agency policy that insures that students are in good health and free from communicable disease and able to perform their training functions. Drug testing may also be required as part of this physical examination. Proof of high school graduation and malpractice insurance are required of all candidates upon acceptance.

i) Certain convictions may prevent a candidate from being licensed as a Psychiatric Technician.

j) All students may be required to complete a background check prior to entering the clinical education phase.

Selection Procedure

In determining eligibility of an applicant, consideration will be given to satisfactory scores on the English Placement Test. The College will make every effort to notify the applicant of acceptance by mail no less than two months prior to the beginning of a program. All Applicants are required to meet the Essential Functions for Success in the Mental Health Technology - Psychiatric Technician Program. ALL APPLICANTS ARE REQUIRED TO MEET THE ESSENTIAL FUNCTIONS FOR SUCCESS IN THE MENTAL HEALTH TECHNOLOGY - PSYCHIATRIC TECHNICIAN PROGRAM.

Physical Demands:

- Perform prolonged, extensive, or considerable standing/walking, lifting, positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability for extremely heavy effort (lift and carry at least 125 pounds)
- Perform consistent reaching, stooping, bending, kneeling, and crouching

Sensory Demands:

- Color vision: ability to distinguish and identify colors (may be corrected with adaptive devices)
- Distance vision: ability to see clearly 20 feet or more
- Depth perception: ability to judge distance and space relationships
- Near vision: ability to see clearly 20 inches or less
- Hearing: able to recognize a full range of tones

Working Environment:

- May be exposed to infectious and contagious disease, without prior notification
- Regularly exposed to the risk of blood borne diseases
- Exposed to hazardous agents, body fluids and wastes
- Exposed to odorous chemicals and specimens
- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end of life issues
- Exposed to products containing latex

Example:

NURSING DEPARTMENT MAJOR 21203

The Mt. San Antonio College Nursing Program, approved and accredited by the California Board of Registered Nursing, is a two-year program designed to prepare men and women to give direct nursing care to clients in various practice settings. The program consists of coursework in nursing, science, general education and clinical nursing practice at local hospitals and health agencies. Graduates of the program receive an Associate in Science Degree in Nursing and are eligible to take the NCLEX-RN examination leading to licensure as a Registered Nurse.

Prerequisite Courses:

1. Human Anatomy, including a laboratory component, a minimum of four (4) semester units.
2. Human Physiology, including a laboratory component, a minimum of four (4) semester units.
3. Microbiology, including a laboratory component, a minimum of four (4) semester units.
4. English 1A (Writing Composition) minimum of three (3) semester units with a minimum grade of C.

Non-course requirements:

1. An overall grade point average of 2.5 for the Human Anatomy, Human Physiology, and Microbiology prerequisite courses with no grade less than a "C" for each course and no more than one repetition of any one of the courses.
2. A cumulative grade point average (GPA) of 2.5 for all college coursework completed.
3. Eligibility for Math 51
4. High school graduation or GED or academic degree from an accredited college/university in the United States.
5. Criminal background check and drug screening must be completed prior to any patient contact.

6. A physical examination, including specific immunizations is required of all candidates prior to the beginning of nursing classes.
7. Current Level C-Provider CPR certification

Requirements for Nursing:

Required courses:

NURS 1A The Nursing Process I 4.7 CSU
NURS 1B The Nursing Process II 4.7 CSU
NURS 2 Pharmacology 2.0 CSU
NURS 3 Medical-Surgical Nursing: Locomotion/Sensation/Integument/Oncology/Immunology 3.5 CSU
NURS 4 Maternity Nursing 3.0 CSU
NURS 5 Psychiatric Nursing 3.0 CSU
NURS 6 Pediatric Nursing 3.0 CSU
NURS 7 Medical-Surgical Nursing: Nutrition/Elimination/Surgical Asepsis 7.0 CSU
NURS 8 Medical-Surgical Nursing: Circulation and Oxygenation 5.0 CSU
NURS 9 Leadership in Nursing 1.0 CSU
NURS 10 Medical-Surgical Nursing: Integration/Regulation 4.0 CSU
NURS 11 Preceptship in Nursing 2.0 CSU

Total Units 43.0

Section 8 85
Programs Leading to an Associates Degree

Requirements for the Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
<th>Institution</th>
</tr>
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<tbody>
<tr>
<td>ANAT 35: Human Anatomy</td>
<td>5.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>ANAT 36: Human Physiology</td>
<td>5.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>ANAT 10A: Introductory Human Anatomy</td>
<td>4.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>ANAT 10B: Introductory Human Physiology</td>
<td>4.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>MIRC 1: Principles of Microbiology</td>
<td>5.0</td>
<td>CSU, UC</td>
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<tr>
<td>MIRC 22: Microbiology</td>
<td>4.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>ENGL 1A: Freshman Composition</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CHLD 10: Child Growth and Development</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>PSY 14: Developmental Psychology</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>PSY 1A: Introduction to Psychology</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>SPCH 1A: Public Speaking</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
</tbody>
</table>

Total Units: 24.0 - 27.0

English Language Skills:
- Proficiency in English is not a criteria for admission into the nursing program.
- Students are encouraged to be able to speak, read and English to complete classes successfully and to ensure safety for themselves and for others.

Ornamental Horticulture

Agricultural Sciences Department

Major: 20119

The courses in ornamental horticulture are designed to enable students to prepare for exciting careers in the essential and diverse horticulture profession. Careers in nursery management, retail garden centers, landscape design, installation and maintenance, arboriculture and botanical gardens, horticulture, interior landscaping, education, and research are just some of the options.

This degree is part of our comprehensive agricultural sciences program. Our program is unique in that most courses provide hands-on experience and are designed to give the student combination of practical skills and technical knowledge. Students who intend to transfer to a college or university which they will attend and also the department chairperson, advisor or counselor to file an educational plan. For additional information, please call the Agricultural Sciences Department, ext. 4540, or visit the Mt. SAC Web site at www.mtsac.edu/instruction/sciences/agriculture.

Requirements for the Major

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGAG 1: Food Production, Land Use and Politics - A Global Perspective</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>AGOR 1: Horticultural Science</td>
<td>3.0</td>
<td>CSU</td>
</tr>
</tbody>
</table>
### Programs Leading to an Associates Degree

#### Paralegal/Legal - Business Administration Department
**Major 21401**
The Paralegal/Legal - Business Administration Department is designed to prepare students for employment as paralegals in both private and public sectors following graduation. The American Bar Association (ABA) By-Laws Section 21.12 uses the terms paralegal and legal assistant interchangeably referring to persons who, although not members of the legal profession, are qualified through education, training, or work experience and are employed or retained by a lawyer, law office, governmental agency, or other entity in a capacity or function which involves the performance, under the direction and supervision of an attorney, of specifically delegated substantive legal work. Paralegals/legal assistants must comply with the legal restrictions in the practice of law by nonlawyers.

The paralegal program stresses practical application and the development of job skills, as well as teaching legal theory. The program is designed to enhance the ability of students to reason, understand and apply correct principles of law by teaching analytical and critical thinking skills as opposed to rote learning. Graduates of the program will possess skills for advancement and specialized areas in the paralegal profession. Students wishing a Bachelor’s Degree (transfer program) should consult with a member of the legal profession, are qualified through education, training, or work experience and are employed or retained by a lawyer, law office, governmental agency, or other entity in a capacity or function which involves the performance, under the direction and supervision of an attorney, of specifically delegated substantive legal work. Paralegals/legal assistants must comply with the legal restrictions in the practice of law by nonlawyers.

The Paralegal/Legal - Business Administration Department Major 21401 is designed to prepare students for employment as paralegals in both private and public sectors following graduation. The American Bar Association (ABA) By-Laws Section 21.12 uses the terms paralegal and legal assistant interchangeably referring to persons who, although not members of the legal profession, are qualified through education, training, or work experience and are employed or retained by a lawyer, law office, governmental agency, or other entity in a capacity or function which involves the performance, under the direction and supervision of an attorney, of specifically delegated substantive legal work. Paralegals/legal assistants must comply with the legal restrictions in the practice of law by nonlawyers.

The American Bar Association has reviewed the Paralegal/Legal Specialist Program and found it in compliance with the standards developed by the Standing Committee on Legal Assistant Programs. The Paralegal/Legal Specialty Program has been granted approval by the American Bar Association.

#### Requirements for the Major
**Required courses:**
- **PLGL 30** Introduction to Paralegal/Legal 3.0 CU
- **PLGL 31A** Legal Analysis and Writing 3.0 CU
- **PLGL 31B** Advanced Legal Analysis and Writing 3.0 CU
- **PLGL 33A** Civil Procedure Pretrial 3.0 CU
- **PLGL 33B** Civil Procedure-Trial and Post-Trial 3.0 CU
- **PLGL 34** Employment and Ethical Issues 2.0 CU
- **PLGL 35A** Employment and Ethical Issues in Paralegalism 3.0 CU
- **PLGL 35B** Employment and Ethical Issues in Paralegalism 3.0 CU
- **PLGL 36** Employment and Ethical Issues in Paralegalism 3.0 CU
- **PLGL 37** Employment and Ethical Issues in Paralegalism 3.0 CU

**Recommended Electives:**
- **BUSL 18** Business Law 3.0 CU
- **BUSL 18H** Business Law - Honors 3.0 CU
- **BUSL 19** Advanced Business Law 3.0 CU
- **BUSL 20** International Business Law 3.0 CU
- **BUSL 31A** Legal Analysis and Writing 3.0 CU
- **BUSL 31B** Advanced Legal Analysis and Writing 3.0 CU

**Special Information:**
The ABA does not recognize the following courses as supplementing their studies with selected elective courses, including PLGL 36 - Paralegal Internship.

### Paralegal/Legal - Corporations/Business Specialty
**Business Administration Department**
**Major 21405**
The Paralegal/Legal - Corporations/Business Specialty program is designed to prepare students for employment as paralegals in both private and public sectors following graduation. The American Bar Association (ABA) By-Laws Section 21.12 uses the terms paralegal and legal assistant interchangeably referring to persons who, although not members of the legal profession, are qualified through education, training, or work experience and are employed or retained by a lawyer, law office, governmental agency, or other entity in a capacity or function which involves the performance, under the direction and supervision of an attorney, of specifically delegated substantive legal work. Paralegals/legal assistants must comply with the legal restrictions in the practice of law by nonlawyers.

The paralegal program stresses practical application and the development of job skills, as well as teaching legal theory. The program is designed to enhance the ability of students to reason, understand and apply correct principles of law by teaching analytical and critical thinking skills as opposed to rote learning. Graduates of the program will possess skills for advancement and specialized areas in the paralegal profession. Students wishing a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

### Recommended Electives:
- **BUSL 18** Business Law 3.0 CU
- **BUSL 18H** Business Law - Honors 3.0 CU
- **BUSL 19** Advanced Business Law 3.0 CU
- **BUSL 20** International Business Law 3.0 CU
- **BUSL 31A** Legal Analysis and Writing 3.0 CU
- **BUSL 31B** Advanced Legal Analysis and Writing 3.0 CU

### Special Information:
The ABA does not recognize the following courses as supplementing their studies with selected elective courses, including PLGL 36 - Paralegal Internship.

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### Table: CISB 15 Microcomputer Applications

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 2</td>
<td>Plant Propagation/ Greenhouse Design</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>AGOR 13</td>
<td>Landscape Design</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>AGOR 24</td>
<td>Integrated Pest Management</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>AGOR 29</td>
<td>Ornamental Plants - Herbs</td>
<td>3.0 CU, UC</td>
</tr>
<tr>
<td>AGOR 30</td>
<td>Ornamental Plants - Trees</td>
<td>3.0 CU, UC</td>
</tr>
<tr>
<td>AGOR 32</td>
<td>Landscaping and Nursery Mgmt</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>AGOR 39</td>
<td>Turf Grass Production and Mgmt</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>AGOR 50</td>
<td>Soil Science and Mgmt</td>
<td>3.0 CU, UC</td>
</tr>
<tr>
<td>AGOR 62</td>
<td>Landscape Irrigation</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>AGOR 71</td>
<td>Landscape Construction</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>AGOR 91</td>
<td>Work Experience in N Operations</td>
<td>1.0</td>
</tr>
<tr>
<td>AGOR 92</td>
<td>Work Experience in N Operations</td>
<td>2.0</td>
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<tr>
<td>AGOR 93</td>
<td>Work Experience in N Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 94</td>
<td>Work Experience in N Operations</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**PLUS Select six (6) units from:**
- AGOR 15 | Interior Landscaping 3.0
- AGOR 25 | Floral Design I 3.0 CU
- AGOR 26 | Floral Design II 3.0 CU
- AGOR 40 | Sports Turf Management 3.0
- AGOR 51 | Tractor and Landscape Equipment Operations 3.0
- AGOR 53 | Small Engine Repair I 3.0 CU
- AGOR 63 | Landscape Irrigation Systems Management 3.0
- AGOR 72 | Landscape Hardscape Applications 3.0 CU
- AGOR 75 | Urban Arboriculture 3.0
- CISB 15  | Microcomputer Applications 4.0 CU

**Total Units:** 43.0 - 46.0
Programs Leading to an Associates Degree

Paralegal/Legal - Criminal Specialty
Business Administration Department
Major 21402

The Paralegal/Legal - Criminal Specialty program is intended to prepare students for employment as paralegals in both private and public sectors following graduation. The American Bar Association (ABA) By-Laws Section 21.12 uses the terms paralegal and legal assistant interchangeably referring to persons who, although not members of the legal profession, are qualified through education, training, or work experience and are employed or retained by a lawyer, law office, governmental agency, or other entity in a capacity or function which involves the performance, under the direction and supervision of an attorney, of specifically delegated substantive legal work. Paralegals/legal assistants must comply with the legal restrictions in the practice of law by nonlawyers.

The paralegal program stresses practical application and the development of job skills as well as teaching legal theory. The program is designed to enhance the ability of students to reason, understand, and apply correct principles of law. The program is designed to enhance the ability of students to reason, understand, and apply correct principles of law by teaching analytical and critical thinking skills as opposed to rote learning. Graduates of the program will qualify for entry level employment and will possess skills for advancement and specialized areas in the paralegal profession. Students wishing a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

The American Bar Association has reviewed the Paralegal/Legal Specialist Program and found it in compliance with the standards developed by the Standing Committee on Legal Assistant Programs. The Paralegal/Legal Specialist Program has been granted approval by the American Bar Association.

Requirements for the Major

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLGL 30 Introduction to Paralegal/Legal</td>
<td>3.0 CSU</td>
</tr>
<tr>
<td>PLGL 31A Legal Analysis and Writing</td>
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Recommended Electives:
The Paralegal/Legal faculty recommend that students complement their studies with selected elective courses, including PLGL 36 - Paralegal Internship.

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Total Units: 35.0

Paralegal/Legal - Family Law Specialty
Business Administration Department
Major 21403

The Paralegal/Legal - Family Law Specialty program is intended to prepare students for employment as paralegals in both private and public sectors following graduation. The American Bar Association (ABA) By-Laws Section 21.12 uses the terms paralegal and legal assistant interchangeably referring to persons who, although not members of the legal profession, are qualified through education, training, or work experience and are employed or retained by a lawyer, law office, governmental agency, or other entity in a capacity or function which involves the performance, under the direction and supervision of an attorney, of specifically delegated substantive legal work. Paralegals/legal assistants must comply with the legal restrictions in the practice of law by nonlawyers.

The paralegal program stresses practical application and the development of job skills as well as teaching legal theory. The program is designed to enhance the ability of students to reason, understand, and apply correct principles of law by teaching analytical and critical thinking skills as opposed to rote learning. Graduates of the program will qualify for entry level employment and will possess skills for advancement and specialized areas in the paralegal profession. Students wishing a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

The American Bar Association has reviewed the Paralegal/Legal Specialist Program and found it in compliance with the standards developed by the Standing Committee on Legal Assistant Programs. The Paralegal/Legal Specialist Program has been granted approval by the American Bar Association.

Requirements for the Major

Required courses:

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Recommended Electives:
The Paralegal/Legal faculty recommend that students complement their studies with selected elective courses, including PLGL 36 - Paralegal Internship.

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Total Units: 38.0

Paralegal/Legal - Landlord/Tenant Specialty
Business Administration Department
Major 21404

The Paralegal/Legal - Landlord/Tenant Specialty program is intended to prepare students for employment as paralegals in both private and public sectors following graduation. The American Bar Association (ABA) By-Laws Section 21.12 uses the terms paralegal and legal assistant interchangeably referring to persons who, although not members of the legal profession, are qualified through education, training, or work experience and are employed or retained by a lawyer, law office, governmental agency, or other entity in a capacity or function which involves the performance, under the direction and supervision of an attorney, of specifically delegated substantive legal work. Paralegals/legal assistants must comply with the legal restrictions in the practice of law by nonlawyers.

The paralegal program stresses practical application and the development of job skills as well as teaching legal theory. The program is designed to enhance the ability of students to reason, understand, and apply correct principles of law by teaching analytical and critical thinking skills as opposed to rote learning. Graduates of the program will qualify for entry level employment and will possess skills for advancement and specialized areas in the paralegal profession. Students wishing a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

The American Bar Association has reviewed the Paralegal/Legal Specialist Program and found it in compliance with the standards developed by the Standing Committee on Legal Assistant Programs. The Paralegal/Legal Specialist Program has been granted approval by the American Bar Association.

Requirements for the Major

Required courses:

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Recommended Electives:
The Paralegal/Legal faculty recommend that students complement their studies with selected elective courses, including PLGL 36 - Paralegal Internship.

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Total Units: 35.0
Park and Sports Turf Management

Agricultural Sciences Department

Major 20116

The courses in park and sports turf management are designed to enable students to prepare for a career in this essential and diverse profession. This degree is part of our comprehensive Agricultural Sciences Program. Our program is unique in that most courses provide hands-on experience designed to give the student a combination of practical skills and technical knowledge. Students who intend to transfer should meet with a counselor or advisor to check the lower division requirements in the catalog of the college or university which they will attend and also the semester and year in which courses are offered.

This program is intended to prepare students to manage a park or sports facility and also for employment following graduation. Students will learn how to design, install and manage irrigation systems, set up and implement fertilizer and pest management programs, design and properly install a complete landscape (including all plants and hardscaping), and properly identify and maintain trees, shrubs, and turfgrasses. In addition, students will learn about personnel management, budgeting and other management topics.

Requirements for the Major

Recommended courses:

- AGAG 1 Food Production, Land Use 3.0 CSU,UC
- AGOR 4 Park Management 3.0
- AGOR 5 Park Facilities 3.0
- AGOR 13 Landscape Design 3.0 CSU
- AGOR 24 Integrated Pest Management 3.0 CSU
- AGOR 29 Ornamental Plants - Herbaceous 3.0 CSU,UC
- AGOR 30 Ornamental Plants - Trees and Woody Shrubs 3.0 CSU,UC
- AGOR 39 Turf Grass Production and Management 3.0 CSU
- AGOR 51 Tractor and Landscape Equipment Operations 3.0
- AGOR 62 Landscape Irrigation - Design and Installation 3.0 CSU
- AGOR 63 Landscape Irrigation Systems Management 3.0
- AGOR 71 Landscape Construction Fundamentals 3.0 CSU

Total Units 44.0 - 47.0

Pet Science

Agricultural Sciences Department

Major 20104

The program of courses in Agriculture is designed to enable students to prepare for a career in this essential and diverse profession. The Department offers a comprehensive Agricultural Sciences Program and is unique in that most courses provide hands-on experience designed to give the student a combination of practical skills and technical knowledge. Students who intend to transfer should meet with a counselor or advisor to check the lower division requirements in the catalog of the college or university they will attend and also the semester and year in which courses are offered.

The following programs list all courses needed to satisfy major requirements. Students may obtain certificates upon completion of required courses listed. It is recommended that all students consult with the department chairperson, counselor or advisor to file an educational plan.

These programs are intended to prepare students for employment following graduation. Students desiring a Bachelor’s Degree should consult with an advisor or catalog of the institution they intend to transfer to check transferability of courses.

Programs Leading to an Associates Degree

Photography

Commercial and Entertainment Arts

Major 21002

This program is designed to prepare the student for employment in the field of photography. A variety of career opportunities are available in photography, art, cinema, communications, industrial arts, graphics, and journalism. Students desiring a Bachelor's Degree should consult with a counselor or advisor to file an educational plan and discuss transferability.

Requirements for the Major

Recommended courses:

- GRAF 10 Photo Editing with Photoshop 3.0
- PHOT 10 Basic Digital and Film Photography 3.0 CSU,UC
- PHOT 11 Advanced Professional Photography 4.0
- PHOT 12 Photographic Alternatives 3.0 CSU,UC
- PHOT 15 History of Photography 3.0 CSU,UC
- PHOT 16 Fashion Photography 3.0
- PHOT 18 Portraiture and Wedding Photography 3.0
- PHOT 17 Photocommunication 3.0
- PHOT 20 Color Photography 3.0
- PHOT 21 Exploring Color Photography 3.0
- PHOT 24 Photography Portfolio Development 2.0
- PHOT 30 Commercial and Illustrative Photography 3.0

Total Units 33.0

Recommended Electives:

- AHS 1 Understanding the Visual Arts
- ART 1 Understanding the Visual Arts
- PHOT 2 Laboratory Studies: Color Photography
- PHOT 1 Laboratory Studies: Black and White Photography

Physical Education

Physical Education Department

Major 20806

This program is designed to prepare students for employment in the field of Physical Education. Students desiring a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to file an educational plan and to discuss transferability.

Requirements for the Major

Recommended courses:

- ANAT 35 Human Anatomy 5.0 CSU,UC
- ANAT 36 Human Physiology 5.0 CSU,UC
- NF 10 Nutrition for Personal Health and Wellness 3.0 CSU
- NF 25 Essentials of Nutrition 3.0 CSU,UC
- NF 25H Essentials of Nutrition - Honors 3.0 CSU,UC
- PE 3 First Aid and CPR 3.0 CSU,UC
- PE 5 Advanced First Aid/ CPR/Emergency Response 3.0 CSU
- PE 17 Introduction to Physical Education 3.0 CSU,UC
- PE 19 Introduction to Care/Prevention 3.0 CSU,UC
- PE 34 Fitness for Living 3.0 CSU,UC
- PLUS

Select eight (8) courses from:

- DNCE Dance: Activity 0.5 - 2.0 CSU,UC
- PE-A Physical Education: Aquatics 0.5 - 2.0 CSU,UC
- PE-F Physical Education: Fitness 0.1 - 2.5 CSU,UC
- PE-I Physical Education: Individual 0.5 - 10.0 CSU,UC
- PE-L Physical Education: Adaptive 0.5 - 10.0 CSU,UC
- PE-S Physical Education: Team Sports 0.5 - 10.0 CSU,UC

Total Units 28.6 - 41.5
Programs Leading to an Associates Degree

Psychiatric Technician to RN
Nursing Department
Major 21209
The Mt. San Antonio College Nursing Program, approved and accredited by the California Board of Registered Nursing, is a two-year program designed to prepare men and women to give direct nursing care to clients in various practice settings. The program consists of course work in nursing, science, general education and clinical nursing practice at local hospitals and health agencies. Graduates of the program receive an Associate in Science Degree in Nursing and are eligible to take the NCLEX-RN examination leading to licensure as a Registered Nurse. The Psychiatric Technician is provided career mobility into the Nursing Program to earn an Associate Degree in Nursing.

Prerequisite Courses:
1. Human Anatomy, including a laboratory component, a minimum of four semester units.
2. Human Physiology, including a laboratory component, a minimum of four semester units.
3. Microbiology, including a laboratory component, a minimum of four semester units.
4. English 1A (Writing Composition) minimum of three semester units with units with a minimum grade of C.
5. PSYC 1A Introduction to Psychology
6. CHILD 10 Child Growth and Development or PSYC 14 Developmental Psychology

Non-course requirements:
1. An overall grade point average of 2.5 for the Human Anatomy, Human Physiology, and Microbiology prerequisite courses with no grade less than a "C" for each course and no more than one repetition of any course.
2. A cumulative grade point average (GPA) of 2.5 for all college coursework completed.
3. Eligibility for MATH 51.
4. High school graduation or GED or academic degree from an accredited college/university in the United States.
5. Possess a current California Psychiatric Technician License.
6. Criminal background check and drug screening must be completed prior to any patient contact.
7. A physical examination, including specific immunizations is required of all candidates prior to the beginning of nursing classes.
8. Current Level C-Provider CPR certification
9. Nursing 70 Role Transition must be completed with a credit grade prior to entrance into the program.

Requirements for Nursing
Required courses:
NURS 3 Medical-Surgical Nursing: 3.5 CSU Locomotion/Sensation/Integument/Oncology/Immunology
NURS 4 Maternity Nursing 3.0 CSU
NURS 6 Pediatric Nursing 3.0 CSU
NURS 7 Medical-Surgical Nursing: 7.0 CSU Nutrition/ Elimination/Surgical Asepsis
NURS 8 Medical-Surgical Nursing: 5.0 CSU Circulation and Oxygenation
NURS 9 Leadership in Nursing 1.0 CSU
NURS 10 Medical-Surgical Nursing: Integration/Regulation 4.0 CSU
NURS 11 Preceptorship in Nursing 2.0 CSU

Total Units 28.5

Requirements for the Major
ANAT 35 Human Anatomy 5.0 CSU, UC
ANAT 36 Human Physiology 5.0 CSU, UC
ANAT 10A Introductory Human Anatomy and Physiology 4.0 CSU, UC
MICR 1 Principles of Microbiology 5.0 CSU, UC
MICR 22 Microbiology 4.0 CSU, UC
ENGL 1A Freshman Composition 4.0 CSU, UC
PSYC 14 Developmental Psychology 3.0 CSU, UC
PSYC 1A Introduction to Psychology 3.0 CSU, UC
SPCH 1A Public Speaking 3.0 CSU, UC

Total Units 25.0 - 27.0

NOTE: Applicants planning to continue their education and enter a baccalaureate program in nursing will need to complete ANAT 35 and ANAT 36 instead of ANAT 10A and ANAT 10B and MICR 1 instead of MICR 22.

Requirements for the Associate Degree
Students must develop an education plan with a counselor or educational advisor to complete college academic requirements for the A.S. degree. Contact Counseling and Advising Services to schedule an appointment.

Selection Process
Beginning Fall 2006, students applying for admission to the Nursing Program will be required to see either a counselor or educational advisor to verify their eligibility to enter the Nursing program.

Procedure:
Students must complete all course prerequisites prior to requesting an appointment for certifying readiness to enter into the Nursing program. Once eligibility has been established, students will enter on a first come first served basis.

The eligibility appointment:
a) Once a student has completed all course prerequisites, the student will then apply to the Nursing Department on an appointment basis.
b) Students who have completed coursework at other colleges must bring the following information to their eligibility appointment:
   - Official transcripts of all college work completed at all colleges;
   - If the prerequisite courses were completed at another college, a course description and a copy of the course syllabus;

Students completing college coursework outside of the United States will need to have their transcripts evaluated by an approved international transcript evaluation agency and must bring the final evaluation to their appointment (students may be able to obtain a list of agencies from the Admissions Office).

Due to specific college deadlines for International Student applications, please inform the Counseling/Educational Advisor that this applies to you.

c) All students will need to bring official proof of high school graduation, GED, or college graduation from an accredited institution in the United States.

Students should also be aware that once they have been admitted to the Nursing program and before beginning the clinical portion of the program, they will need to be able to pass both a criminal background check, including a screening by the Office of Inspector General for welfare or Social Security fraud, as well as testing negative for drug use. ALL APPLICANTS ARE REQUIRED TO MEET THE ESSENTIAL FUNCTIONS FOR SUCCESS IN THE NURSING PROGRAM.

Physical Demands:
- Perform prolonged, extensive, or considerable standing/walking, lifting, positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability for extremely heavy effort (lift/carry 50 lbs. or more)
- Perform considerable reaching, stooping, bending, kneeling, and crouching

Sensory Demands:
- Color vision: ability to distinguish and identify colors (may be corrected with adaptive devices)
- Distance perception: ability to see clearly 20 feet or more
- Depth perception: ability to judge distance and space relationships
- Near vision: ability to see clearly 20 inches or less
- Hearing: able to recognize a full range of tones

Working Environment:
- May be exposed to infectious and contagious disease, without prior notification
- Regularly exposed to the risk of blood borne diseases
- Exposed to hazardous agents, body fluids and wastes
- Exposed to odorous chemicals and specimens
- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end life issues
- Exposed to products containing latex
Radio Broadcasting: Behind the Scenes
Commercial and Entertainment Arts
Major 20606

The Radio Broadcasting Behind-the-Scenes Degree is designed for students who are interested in the non-performance side of the broadcasting industry. Instruction in this major prepares students for entry-level jobs in a variety of areas including production, promotion, copywriting and management. Students also receive instruction in the business side of the industry and can further customize their program by selecting from a variety of optional courses. Students intending to pursue a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
- R-TV 06 Broadcast Traffic Reporting 1.5
- R-TV 08 KSAX Radio Studio Operations 2.0 CSU
- R-TV 17 Internet Radio Broadcasting 3.0
- R-TV 26 Legal Issues in Entertainment Law 3.0
- R-TV 27 Radio Drama 3.0

Total Units 36.0 - 37.0

Recommended Electives:

Radio Broadcasting: On The Air
Commercial and Entertainment Arts
Major 20605

The Radio Broadcasting On-The-Air Degree is designed to prepare students for an entry-level job in a variety of performance areas of the broadcasting industry, including disc jockey, news anchor, sportscaster, and commercial voice-overs. Students also receive instruction in the business side of the industry and can further customize their program by selecting from a variety of optional courses. Students intending to pursue a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

Requirements for the Major
Required courses:
- R-TV 01 Introduction to Broadcasting 3.0 CSU
- R-TV 02 Radio and Television Announcing 3.0 CSU
- R-TV 05 Radio-TV Newswriting 3.0
- R-TV 07 Commercial Voice-Overs 3.0
- R-TV 11A Beginning Radio Production 3.0 CSU
- R-TV 11B Advanced Radio Production 3.0 CSU
- R-TV 15 Broadcast Business Practices 3.0
- R-TV 16 Broadcast Career Preparation 3.0
- R-TV 97A Radio/Entertainment Industry Seminar 1.0
- R-TV 97B Radio/Entertainment Industry Internship 1.0
- R-TV 97C Radio/Entertainment Industry Internship - KSAX Radio 1.0
- R-TV 97D Radio/Entertainment Industry Internship - KSAX Radio 2.0

PLUS Select nine (9) units from:

- R-TV 03 Sportscasting and Reporting 1.5
- R-TV 04 Broadcast News Field Reporting 3.0
- R-TV 06 Broadcast Traffic Reporting 1.5
- R-TV 08 KSAX Radio Studio Operations 2.0 CSU
- R-TV 09 Broadcast Sales and Promotion 3.0
- R-TV 10 Radio Management and Programming 3.0
- R-TV 12 Commercial Copywriting 3.0
- R-TV 17 Internet Radio Broadcasting 3.0
- R-TV 26 Legal Issues in Entertainment Law 3.0
- R-TV 27 Radio Drama 3.0

Total Units 36.0 - 37.0

Radiologic Technology
Radiologic Technology Department
Major 21206

The course of study in Radiologic Technology offered at Mt. San Antonio College and its affiliated hospitals will prepare students for entry-level jobs in the following settings. The courses are developed to enable students to operate x-ray equipment, assist in the diagnosis of disease, and to observe proper medical ethics. Students will learn the nature of radiation, the principles of electricity, the structure of x-ray machines, and the operation of a clinical x-ray department.

Requirements for the Major
Required courses:
- ANAT 10A Introductory Human Anatomy 4.0 CSU,UC
- MEDI 90 Medical Terminology 3.0 CSU
- RAD 30 Radiographic Pathology 1.5
- RAD 31 Fluoroscopy 2.0
- RAD 32 Digital Imaging in Radiology 2.0
- RAD 50 Radiologic Technology 3.0 CSU
- RAD 52A Techniques of Radiologic Technology 4.5 CSU
- RAD 52B Techniques of Radiologic Technology 2.5 CSU
- RAD 53 Techniques of Radiologic Technology 5.0 CSU
- RAD 54 Techniques of Radiologic Technology 3.0 CSU

Recommended Electives:

- ANAT 10A Introductory Human Anatomy
- MEDI 90 Medical Terminology
- RAD 30 Radiographic Pathology
- RAD 31 Fluoroscopy
- RAD 32 Digital Imaging in Radiology
- RAD 50 Radiologic Technology
- RAD 52A Techniques of Radiologic Technology
- RAD 52B Techniques of Radiologic Technology
- RAD 53 Techniques of Radiologic Technology
- RAD 54 Techniques of Radiologic Technology

Total Units 77.0

NOTE: ANAT 10A and MEDI 90 may be taken prior to entering program.

Admission Requirements:
In addition to meeting Mt. San Antonio College’s academic standards for admission, applicants must be in good standing and satisfy the following requirements:

a) Applicant must be 18 years of age upon entrance into the program.
b) High school graduate or equivalent.
c) Possess a valid Social Security Card. This is a licensed profession, and a valid Social Security Number is required to obtain state certification and national licensure.
d) File a college application and be accepted as a student at Mt. San Antonio College.
e) Take the college placement examination which is used as an indicator. If you have already taken a college placement test within the past two years at another school, arrange to have your scores forwarded to the Technology and Health Division Office. If you were tested at Mt. San Antonio College, the Technology and Health Division Office will obtain the test scores as long as an “Application for Admission” is on file with the Admissions and Records Office. Arrangement should be made with the Service Center to schedule a date and time to take the college placement examination if required. The Assessment Center is open Monday through Friday. You may contact them at (909)594-5611 ext. 4265.
Programs Leading to an Associates Degree

f) Complete the following prerequisite courses with a minimum grade of “C” in each course.

1. General High School Algebra (one year) or Introductory College Algebra (one semester) or MATH 51 (Elementary Algebra, or equivalent);
2. General High School Chemistry (one year) or Introductory College Chemistry (one semester) or CHEM 10 - Chemistry for Allied Health.

Students must complete prerequisite courses before applying to the program.

g) After completion of the prerequisites, submit an application for the Radiologic Technology Program to the Technology and Health Division Office (909) 594-5611, ext. 4750. All applications are dated upon receipt in the Technology and Health Division Office. A program begins each summer intersession.

h) Forward two official transcripts of all coursework completed (high school, and other than Mt. San Antonio College courses). One transcript must be sent to Technology and Health Division Office and the other to Admissions and Records.

i) For students who possess a college degree, the English placement test is not required; however, it will be necessary for a student to obtain two official copies of the college transcript showing the degree issued. One official transcript must be sent to Technology and Health Division Office and the other to Admissions and Records. If the courses were taken and/or the degree obtained at Mt. San Antonio College, it is not necessary to request transcripts. Request the transcript for the Division Office be addressed as follows:

Mt. San Antonio College
Technology and Health Division
Radiologic Technology Program
1100 North Grand Avenue
Walnut CA 91789-1299

j) Make an appointment with an educational advisor to review general education requirements for graduation.

Acceptance Requirements:

a) A mandatory orientation meeting with the Radiologic Technology Department will be held during the spring semester. You will be contacted with date and time of orientation once you have been accepted.

b) A physical examination, including certain immunizations and drug testing is required as part of the physical examination for all radiologic technology students before entrance into the clinical setting. Forms and information will be provided at time of orientation.

c) All students will be required to complete a criminal background check prior to entering the educational phase (a valid Social Security Number is required to complete this process.)

Selection Procedure:

Selection of students is based upon the completion of the above admission requirements and date of application. The Department will make every effort to notify the applicant of acceptance by mail no less than one month prior to beginning of a program.

Program Completion Requirements:

a) In addition to the major requirements and general education, students must also complete a course in venipuncture for radiographers. This course is offered through Community Education but may be taken elsewhere with prior approval from the department.

b) A course in mammography is also offered in the final semester for graduate students and licensed radiographers. This course is optional.

Working Environment:

May be exposed to infectious and contagious disease, without prior notification

Regularly exposed to the risk of blood borne diseases

Exposed to hazardous agents, body fluids and wastes

Exposed to odorous chemicals and specimens

Subject to hazards of flammable, explosive gases

Subject to burns and cuts

Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances

Handle emergency or crisis situations

Subject to many interruptions

Requires decisions/actions critical to patient safety

Exposed to products containing latex.

d) Move, adjust, and manipulate portable and fluoroscopic equipment according to established procedures and standards of speed and accuracy while conducting radiographic examinations.

e) Maneuver well enough to physically protect himself or herself from injury caused by patients exhibiting aggressive behaviors.

f) Physically place patients in the proper positions for the examination according to established procedures and standards of speed and accuracy.

g) Rapidly respond to situations involving the health and safety of patients, providing physical and emotional support to the patient during radiographic procedures, providing basic first aid and emergency care in the absence of or until a physician arrives.

h) Function adequately under stressful situations related to technical and procedural standards of patient care situations.

i) Hear well enough (average 30 decibels for both ears) to respond to directions or calls for help from individuals remote from the location of the student.

j) Speak English clearly enough to explain and direct procedural information to patients, and to communicate with physicians, technical staff, and faculty. Students for which English is a second language may be required to complete a verbal communication assessment prior to entering the program.

k) Calculate and select proper technical exposure factors according to the individual needs of the patient's condition and requirements of the procedure with speed and accuracy.

l) View and evaluate the recorded images of a radiograph for the purpose of identifying proper patient positioning, accurate procedural sequencing, proper exposure (and/or “S” number), and other established technical qualities.

Real Estate

Business Administration Department Major 20512

This program prepares students for employment following graduation. Students wishing a Bachelor’s degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses. The requirements for a degree in real estate include the eight classes needed prior to applying to take the Real Estate Broker License Exam as well as several additional classes designed to strengthen the skills needed to succeed in a career in real estate.

Requirements for the Major

Required courses:

BUSR 50 Real Estate Principles 3.0
BUSR 51 Legal Aspects of Real Estate 3.0
BUSR 52 Real Estate Practice, or 3.0
BUS 52D Real Estate Practice 3.0
BUSR 53 Real Estate Finance 3.0
BUSR 55 Real Estate Economics 3.0
BUSR 81 Principles and Procedures 3.0
CSB 15 Microcomputer Applications 4.0

PLUS

Group A

Select two (2), three (3) or four (4) courses from:

BUS 7 Principles of Accounting 5.0
BUS 11 Fundamentals of Accounting 3.0
BUS 72 Bookkeeping - Accounting 5.0
BUSL 18 Business Law 3.0
BUSM 20 Principles of Business 3.0
BUSM 60 Human Relations in Business 3.0
BUSM 66 Small Business Management 3.0
BUS 5 Business English 3.0
BUS 25 Business Communications 3.0
BUS 26 Oral Communications for Business 3.0
BUS 35 Professional Selling 3.0
BUS 36 Principles of Marketing 3.0
PSYC 1A Introduction to Psychology 3.0

PLUS

Group B

Select zero (0), one (1) or two (2) units from:

BUSR 57 Income Tax Aspects 3.0
BUSR 59 Real Estate Property Management 3.0
BUS 59 Real Estate Investment Planning 3.0
BUS 62 Mortgage Loan Brokering 3.0
BUS 76 Escrow Procedures I 3.0

Total Units 30.5 - 34.5

2008-09 Mt. San Antonio College Catalog
The following programs list all courses needed to satisfy major requirements. It is recommended that all students consult with the department chairperson or faculty advisor to file an educational plan. Students must file an educational plan with the Director of the Registered Veterinary Technology Program during the first year of study. These programs are intended to prepare students for employment following graduation. Students desiring a Bachelor’s Degree (transfer program) should consult with the department chairperson, counselor or advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**

- BUSR 81: Appraisal: Principles and Procedures 3.5
- BUSR 82: Uniform Standards of Professional Appraisal Practice 1.0
- BUSR 83: Residential Appraisal 3.5
- BUSR 84: Residential Appraisal: Case Studies 2.5
- PLUS

Select seven (7) courses from:

- BUSA 11: Fundamentals of Accounting 3.0
- BUSA 50: Real Estate Principles 3.0 CSU
- BUSA 51: Legal Aspects of Real Estate 3.0
- BUSA 53: Real Estate Finance 3.0
- BUSA 55: Real Estate Economics 3.0
- BUSA 57: Income Tax Aspects of Real Estate Investments 3.0
- BUSA 59: Real Estate Property Management 3.0
- BUSA 76: Escrow Procedures I 3.0
- CSB 15: Microcomputer Applications 4.0 CSU,UC
- INSP 70: Elements of Construction 3.0 CSU

**Total Units 31.5 - 32.5**

**Recommended Electives:**

**Real Estate Appraisal**

**Business Administration Department**

**Major 20513**

This program prepares students for employment following graduation. Students wishing a Bachelor’s Degree (transfer program) should consult with an advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**

- BUSR 81: Appraisal: Principles and Procedures 3.5
- BUSR 82: Uniform Standards of Professional Appraisal Practice 1.0
- BUSR 83: Residential Appraisal 3.5
- BUSR 84: Residential Appraisal: Case Studies 2.5
- PLUS

Select seven (7) courses from:

- BUSA 11: Fundamentals of Accounting 3.0
- BUSA 50: Real Estate Principles 3.0 CSU
- BUSA 51: Legal Aspects of Real Estate 3.0
- BUSA 53: Real Estate Finance 3.0
- BUSA 55: Real Estate Economics 3.0
- BUSA 57: Income Tax Aspects of Real Estate Investments 3.0
- BUSA 59: Real Estate Property Management 3.0
- BUSA 76: Escrow Procedures I 3.0
- CSB 15: Microcomputer Applications 4.0 CSU,UC
- INSP 70: Elements of Construction 3.0 CSU

**Total Units 31.5 - 32.5**

**Registered Veterinary Technology**

**Agricultural Sciences Department**

**Major 20105**

The program of courses in Agriculture is designed to prepare students for careers as Registered Veterinary Technicians who will work under the supervision of licensed private organizations including veterinary hospitals, research vivariums, animal shelters, and other animal care agencies. Students who satisfactorily complete the requirements of this program are eligible to take the State of California Certified Examination for Registered Veterinary Technicians.

Students wishing to be admitted to the Registered Veterinary Technology program must meet with the Director of the Registered Veterinary Technology program at least two weeks prior to the beginning of the semester in which enrollment shall begin.

**Requirements for the Major**

**Required courses 1st year:**

- AGAN 1: Animal Science 3.0 CSU,UC
- AGAN 2: Animal Nutrition 3.0 CSU,UC
- AGAN 51: Animal Handling and Restraint 3.0 CSU
- AGAN 94: Animal Breeding 3.0
- AGHE 54: Veterinary Office Procedures 3.0
- AGLI 95: Anatomy of Domestic Animals 4.0 CSU
- AGLI 96: Animal Sanitation and Disease Control 3.0 CSU
- AGLI 98: Physiology of Domestic Animals 2.0

**Required courses 2nd year:**

- AGHE 60: Medical Nursing and Animal Care 4.0 CSU
- AGHE 61: Surgical Nursing 4.0 CSU
- AGHE 62A: Clinical Pathology 4.0 CSU
- AGHE 62B: Clinical Pathology 4.0 CSU
- AGHE 64: Veterinary Pharmacology 3.0 CSU
- AGHE 65: Veterinary Radiography 2.0 CSU
- AGHE 79: Laboratory Animal Medicine 3.0 CSU and Care 3.0 CSU
- AGHE 84A: Applied Animal Health Procedures 1.0
- AGHE 84B: Applied Animal Health Procedures 1.0
- AGHE 85: Seminar in Animal Health Technology 1.0

**PLUS**

Select four (4) units from:

- AGHE 83A: Work Experience in Animal Health 1.0
- AGHE 83B: Work Experience in Animal Health 2.0

Select six (6) units from:

- AGLI 12: Exotic Animal Management 3.0
- AGLI 14: Swine Production 3.0 CSU
- AGLI 16: Horse Production 4.0 CSU,UC
- AGLI 17: Sheep Production 3.0 CSU
- AGLI 18: Horse Ranch Management 4.0 CSU
- AGLI 19: Horse Hoof Care 2.0 CSU
- AGLI 20: Beef Production 3.0 CSU
- AGPE 70: Pet Shop Management 3.0
- AGPE 71: Canine Management 3.0
- AGPE 72: Feline Management 3.0
- AGPE 73: Tropical and Coldwater Fish Management 2.0
- AGPE 74: Reptile Management 2.0
- AGPE 76: Aviculture - Cage and Aviary Birds 3.0

**Total Units 60.0**

**Respiratory Therapy**

**Respiratory Technology Department**

**Major 21205**

The Respiratory Therapy Program, which is accredited by the Committee on Accreditation for Respiratory Care (CoARC), is designed to train students to function as Respiratory Therapists.

Respiratory Therapy is the application of technical skills involving a complete understanding of cardiopulmonary physiology and recognition of various pathological conditions that alter the patient’s ability to breathe effectively.

By applying medical gases under pressure – i.e., compressed air, oxygen, and other mixtures – to the airways through the use of various kinds of equipment, the therapist, under the direction of the physician, treats the diseased or ineffective respiratory system.

Some mechanical aptitude and manual dexterity is helpful in learning the operation of specialized equipment. This includes diagnostic apparatus which aids the physician in detecting cardiopulmonary diseases.

**Requirements for the Major**

**Required courses:**

- RESD 50: Theory and Principles of Respiratory Therapy 2.0 CSU
- RESD 51A: Respiratory Therapy Science 4.0 CSU
- RESD 51B: Respiratory Therapy Science 4.0 CSU
- RESD 52: Pulmonary Anatomy and Physiology 3.0 CSU
- RESD 53: Cardiopulmonary Pathophysiology 3.0 CSU
- RESD 55: Adult Respiratory Intensive Care 3.0 CSU
- RESD 56A: Techniques of Respiratory Therapy 2.5 CSU
- RESD 56B: Techniques of Respiratory Therapy 6.0 CSU
- RESD 56C: Techniques of Respiratory Therapy 2.5 CSU
- RESD 56D: Techniques of Respiratory Therapy 6.0 CSU
- RESD 57A: Special Procedures for Respiratory Care 1.5 CSU
- RESD 57B: Special Procedures for Respiratory Care 1.5 CSU
- RESD 58: Neonatal Intensive Care 3.0 CSU
- RESD 59: Respiratory Therapeutic Modalities 3.0 CSU
- RESD 60: Comprehensive Pulmonary Assessment 2.0 CSU
- RESD 61: Current Issues in Respiratory Care 3.0 CSU

**Total Units 50.0**

**Special Information**

The completion of the Respiratory Therapy Program and receipt of a certificate documenting completion of required courses requires completion of the Associate Degree. The student may elect to pursue either the Associate in Science or Associate of Arts Degree.

All students entering the program must submit an educational plan showing the major course requirements with the general education requirements for the degree.

To remain in the program, students must maintain a “C” or better grade in all courses.

Upon completion of the Respiratory Therapy requirements, the student is given a certificate documenting completion. This certification will permit the student to sit for all National Board for Respiratory Care (NBRC), Incorporated, examinations.

**Entrance Requirements:**

In addition to meeting Mt. San Antonio College’s academic standards for admission, applicants must be in good standing and satisfy the following requirements:

1. Applicant must be at least 18 years of age upon entrance into the program and must be a high school graduate or equivalent. Please provide copy of diploma as proof of high school completion.
2. File a college application and be accepted as a student at Mt. San Antonio College.
Programs Leading to an Associates Degree

3) Applicant must take the College placement exams before taking any of the prerequisite or respiratory therapy courses. **NOTE:** Testing is administered by the Assessment Center located in the Student Services Center, Building 9B. You may contact them at (909) 594-5611, ext. 4265, to set up an appointment.

If you have taken English and math at another college, please provide college transcripts.

For students who possess a college degree, the college placement examination is not required. However, it will be necessary for the applicant to obtain two official copies of the college transcript showing the degree issued. One official transcript must be sent to the Respiratory Therapy Program Office and the other to the Admissions Office. If the degree was obtained at Mt. SAC, it is not necessary to request transcripts. Transcripts should be addressed as follows:

Mt. San Antonio College Technology and Health Division Respiratory Therapy Program 1100 North Grand Avenue Walnut CA 91789-1389

4) Submit an application for the Respiratory Therapy Program to the Technology and Health Division Office (Bldg. 28A, Room 101E), (909) 594-5611, ext. 4750. All applications are dated upon receipt.

It is highly recommended that students complete their general education requirements prior to entering the program.

Foreign Transcripts:

All coursework taken outside of the United States must be analyzed by a designated agency for foreign transcript evaluation. No foreign course work will be accepted without this evaluation. It is the sole responsibility of the applying student to get the evaluation completed before entry into the program. Information for transcript evaluation is available in the Technology and Health Division.

Selection Procedure:

Selection for the Respiratory Therapy program is on a first-come/ first-served basis. It is strongly recommended that the prerequisites are completed prior to entering the program. Completion is not, however, mandatory for acceptance.

A.S. Degree Requirements

All students entering the Respiratory Therapy Program MUST complete all the major course requirements and the general education requirements necessary to complete the Associate Degree before a certificate documenting completion in Respiratory Therapy will be given. This certificate will permit the student to sit for all National Board for Respiratory Care (NBRC), Incorporated, examinations.

Other Requirements:

All students will be required to complete a background check prior to entering the clinical education phase. A physical examination, including specific immunizations, is required of all candidates prior to beginning classes. These requirements are in accordance with healthcare agency policy that insures that students are in good health and free from communicable disease and able to perform their training functions. Drug testing is required as a part of this physical examination. All Applicants are required to meet the Essential Functions for Success in the Respiratory Therapy Program.

Physical Demands:

- Perform prolonged, extensive, or considerable standing/walking, lifting, positioning, pushing, and/or transferring patients
- Possess the ability to perform fine motor movements with hands and fingers
- Possess the ability for extremely heavy effort (lift and carry at least 50 pounds or more)
- Perform considerable reaching, stooping, bending, kneeling, and crouching

Sensory Demands:

- **Color vision:** ability to distinguish and identify colors (may be corrected with adaptive devices)
- **Distance vision:** ability to see clearly 20 feet or more
- **Depth perception:** ability to judge distance and space relationships
- **Near vision:** ability to see clearly 20 inches or less
- **Hearing:** able to recognize a full range of tones

Working Environment:

- May be exposed to infectious and contagious disease, without prior notification
- Regularly exposed to the risk of blood borne diseases
- Exposed to hazardous agents, body fluids and wastes
- Exposed to odorous chemicals and specimens

- Subject to hazards of flammable, explosive gases
- Subject to burns and cuts
- Contact with patients having different religious, culture, ethnicity, race, sexual orientation, psychological and physical disabilities, and under a wide variety of circumstances
- Handle emergency or crisis situations
- Subject to many interruptions
- Requires decisions/actions related to end of life issues
- Exposed to products containing latex

**English Language Skills:**

Although proficiency in English is not a criteria for admission into the Respiratory Therapy Program, students are encouraged to be able to speak, write, and read English to complete classes successfully and to ensure safety for themselves and others.

**Sign Language/Interpreting Sign Language Department**

**Major 20801**

The Mt. San Antonio College Interpreter Training Program is designed to prepare individuals for careers as Sign Language Interpreters. Interpreters are needed wherever communication happens between the hearing community and the Deaf and hard-of-hearing community. There are an endless number of settings in which this communication takes place. Interpreters are employed by school districts, cruise ship companies, corporations, government agencies, hospitals, colleges and universities, and a vast number of other organizations and private businesses.

Program Preparation: Preparation for the program includes fluency in American Sign Language demonstrated by the completion of SIGN 104, American Sign Language 4, or the equivalent skill and English fluency demonstrated by the completion of ENGL 1A. National Certification: There are many specialties within the field of Sign Language Interpreting, but the focus of this program is on preparing the interpreter generalist. Although requiring some type of certification is becoming more common in California, there are still many job opportunities for the precertified interpreter. Completing the certificate in Sign Language/Interpreting does not make one a “Certified Interpreter”; however, graduates of this program are encouraged to apply for National Certification through the Registry of Interpreters for the Deaf (RID) at www.rid.org.

**Requirements for the Major**

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN 105</td>
<td>American Sign Language 5</td>
<td>4.0</td>
</tr>
<tr>
<td>SIGN 108</td>
<td>Fingerspelling</td>
<td>2.0</td>
</tr>
<tr>
<td>SIGN 201</td>
<td>Deaf Perspectives</td>
<td>3.0</td>
</tr>
<tr>
<td>SIGN 202</td>
<td>American Deaf Culture</td>
<td>3.0 CSU, UC</td>
</tr>
<tr>
<td>SIGN 210</td>
<td>American Sign Language Structure</td>
<td>3.0 CSU</td>
</tr>
<tr>
<td>SIGN 220</td>
<td>American Sign Language/English</td>
<td>3.0 CSU</td>
</tr>
<tr>
<td>SIGN 223</td>
<td>Principles of Interpreting</td>
<td>3.0</td>
</tr>
<tr>
<td>SIGN 225</td>
<td>Ethical Decision Making for Interpreters</td>
<td>2.0</td>
</tr>
<tr>
<td>SIGN 227</td>
<td>Cognitive Processing for Interpreters</td>
<td>4.0</td>
</tr>
<tr>
<td>SIGN 231</td>
<td>Interpreting</td>
<td>4.0</td>
</tr>
<tr>
<td>SIGN 232</td>
<td>Advanced Interpreting</td>
<td>4.0</td>
</tr>
<tr>
<td>SIGN 239</td>
<td>Practicum</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**PLUS**

Select three (3) courses from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN 99</td>
<td>Special Projects in Sign Language/Interpreting</td>
<td>2.0</td>
</tr>
<tr>
<td>SIGN 238</td>
<td>Oral Transliteration</td>
<td>3.0</td>
</tr>
<tr>
<td>SIGN 240</td>
<td>Vocabulary Building for Interpreters</td>
<td>2.0</td>
</tr>
<tr>
<td>SIGN 250</td>
<td>Interpreting with Classifiers</td>
<td>1.5</td>
</tr>
<tr>
<td>SIGN 260</td>
<td>Video Interpreting</td>
<td>1.5</td>
</tr>
<tr>
<td>SL 2</td>
<td>Linked Service Learning</td>
<td>1.0 CSU</td>
</tr>
</tbody>
</table>

**Total Units 40.0 - 43.0**
### Small Business Management
#### Accounting and Management Department
**Major 20508**

This program is intended to prepare students for employment following graduation. Students wishing a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

**Requirements for the Major**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 7</td>
<td>5.0</td>
<td>Principles of Accounting - Financial</td>
</tr>
<tr>
<td>BUSM 10</td>
<td>3.0</td>
<td>Principles of Continuous Quality Improvement</td>
</tr>
<tr>
<td>BUSM 20</td>
<td>3.0</td>
<td>Principles of Business</td>
</tr>
<tr>
<td>BUSM 60</td>
<td>3.0</td>
<td>Human Relations in Business</td>
</tr>
<tr>
<td>BUSM 61</td>
<td>3.0</td>
<td>Business Organization and Management</td>
</tr>
<tr>
<td>BUSM 62</td>
<td>3.0</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>BUSM 66</td>
<td>3.0</td>
<td>Small Business Management</td>
</tr>
<tr>
<td>BUSS 36</td>
<td>3.0</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>CSIB 15</td>
<td>4.0</td>
<td>Microcomputer Applications</td>
</tr>
</tbody>
</table>

**Total Units** 30.0

**Recommended Electives:**
- BUSM 81 Work Experience in Business
- BUSM 82 Work Experience in Business
- BUSM 83 Work Experience in Business
- BUSM 84 Work Experience in Business
- BUSM 85 Special Issues in Business
- BUSS 85 Special Issues in Marketing

The Small Business Management faculty recommends that students complement their studies with selected elective courses chosen from the list above. Students should meet with a professor of Small Business Management to help them determine which electives would best suit their career plans.

### Television Production
#### Commercial and Entertainment Arts
**Major 20602**

Students will gain experience in film-style production, remote and studio production. This course of study qualifies the student for an Associate of Science degree in television production, and is designed to prepare a student for an entry-level job in the industry in a variety of areas. This includes not only skills used in production, but also preproduction, editing, financial and legal affairs.

**Requirements for the Major**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-TV 01</td>
<td>3.0</td>
<td>Introduction to Broadcasting</td>
</tr>
<tr>
<td>R-TV 15</td>
<td>3.0</td>
<td>Broadcast Business Practices</td>
</tr>
<tr>
<td>R-TV 16</td>
<td>3.0</td>
<td>Broadcast Career Preparation</td>
</tr>
<tr>
<td>R-TV 19A</td>
<td>3.0</td>
<td>Beginning Television Production</td>
</tr>
<tr>
<td>R-TV 19B</td>
<td>3.0</td>
<td>Advanced Television Production</td>
</tr>
<tr>
<td>R-TV 100B</td>
<td>2.0</td>
<td>Work Experience in Film and TV</td>
</tr>
</tbody>
</table>

**PLUS**

Select twelve (12) units from:
- R-TV 05 Radio-TV Newswriting 3.0
- R-TV 18 Writing for Television/Film 3.0
- R-TV 20 Television News Production 3.0
- R-TV 21 Remote Television Production and Engineering 3.5
- R-TV 22 Editing for Film and Television 3.0

**Total Units** 29.0

**Recommended Electives:**
- ANIM 115 Storyboarding
- R-TV 26 Current Issues in Entertainment Law
- THTR 17 Acting for Television

### Welding
#### Air Conditioning, Water & Welding Technologies
**Major 20919**

This program is designed to prepare the student for employment in the broad field of welding. It leads to occupations in manufacturing and repair and helps prepare the student for positions in supervision.

Courses in the welding curriculum prepare students for welding certification. The college is a testing agency for the City of Los Angeles and is authorized to administer the performance test for the Structural Welding Certificate. There is a $50 charge for students and $60 for non-students to take this test. Topics of the written portion of the test which is administered by the city are reviewed in various welding courses offered by the college.

This program is intended to prepare students for employment following graduation. Students desiring a Bachelor's Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

**Requirements for the Major**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 40</td>
<td>2.0</td>
<td>Introduction to Welding</td>
</tr>
<tr>
<td>WELD 50</td>
<td>2.0</td>
<td>Oxyacetylene Welding</td>
</tr>
<tr>
<td>WELD 51</td>
<td>2.0</td>
<td>Basic Electric Arc Welding</td>
</tr>
<tr>
<td>WELD 53A</td>
<td>3.0</td>
<td>Welding Metallurgy</td>
</tr>
<tr>
<td>WELD 70A</td>
<td>3.0</td>
<td>Beginning Arc Welding</td>
</tr>
<tr>
<td>WELD 70B</td>
<td>3.0</td>
<td>Intermediate Arc Welding</td>
</tr>
<tr>
<td>WELD 70C</td>
<td>3.0</td>
<td>Certification for Welders</td>
</tr>
<tr>
<td>WELD 80</td>
<td>3.0</td>
<td>Fabrication and Construction Welding</td>
</tr>
</tbody>
</table>

**Total Units** 21.0

**Recommended Electives:**
- BUSS 61 Business Organization and Management
- EDT 11 Technical Engineering Drawing I
- MFG 70 Technical Mathematics - Manufacturing Applications
- WELD 30 Metal Sculpture
- WELD 60 Print Reading and Computations for Welders
- WELD 81 Pipe and Tube Welding
### Programs Leading to an Associates Degree

**ASSOCIATE IN ARTS DEGREES (A.A.)**

Liberal Arts and Sciences with area of emphasis in one of the following:
- Business; Communication; Fine Arts; Humanities; Information Technology; Kinesiology and Wellness; Language Arts; Mathematics; Music; Natural Sciences; and Social Sciences

Mt. San Antonio College’s Associate of Arts degrees are designed to meet the needs of students interested in graduating with a two-year college degree by studying in a specific area of emphasis. These students are not intending to pursue a specific occupational major, nor are they necessarily planning to transfer. However, careful educational planning with a counselor or an educational advisor will help ensure that, if a student subsequently decides to transfer at a later date to a four-year college or university, he or she would have a solid foundation in the transfer process. Transfer students may also become eligible for a Certificate of Achievement in CSU General Education Breadth or Intersegmental General Education Transfer Curriculum (IGETC) by completing requirements shown on pages 102-110 of this catalog.

To qualify for an Associate of Arts degree, students must complete all the graduation requirements as listed on page 31 of this catalog. In addition, students choose one of eleven “areas of emphasis” and complete the appropriate requirements as shown in this section. Courses listed within an area of emphasis may also be used to satisfy general education requirements, with additional elective courses chosen by the student to complete the 60-unit degree requirement. The printed degree and transcript notation will read “Associate of Arts in Liberal Arts and Sciences, Emphasis in (specific area).”

**Area of Emphasis Requirements (choose one)**

#### Associate of Arts Degree in Liberal Arts and Sciences

**Emphasis in Business**

An emphasis in Business provides the student with an understanding of business functions and economic analysis. Upon completion of this degree students will be prepared for an entry level job in the business world.

**Core/Required Courses (19 units)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSC 1AH</td>
<td>Principles of Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSC 1B</td>
<td>Principles of Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSC 1BH</td>
<td>Principles of Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 20</td>
<td>Principles of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>CSB 15</td>
<td>Microcomputer Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>SPCH 7</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units 19.0**

**PLUS**

Choose one (1) of the following tracks:

**Performance Studies Track** (6 additional units selected from the following):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 3</td>
<td>Voice and Diction</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 4</td>
<td>Oral Interpretation of Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 5</td>
<td>Readers Theater</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 1B</td>
<td>Intermediate Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 15A</td>
<td>Forensics</td>
<td>2.0</td>
</tr>
<tr>
<td>SPCH 15B</td>
<td>Forensics</td>
<td>2.0</td>
</tr>
<tr>
<td>THTR 11</td>
<td>Principles of Acting I</td>
<td>3.0</td>
</tr>
<tr>
<td>THTR 12</td>
<td>Principles of Acting II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Intercultural Track** (6 additional units selected from the following):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 7</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 20</td>
<td>Sociology of Ethnic Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 20H</td>
<td>Sociology of Ethnic Relations - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 15</td>
<td>Major World Religions</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 15H</td>
<td>Major World Religions - Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units 24.0**

#### Associate of Arts Degree in Liberal Arts and Sciences

**Emphasis in Communication**

An emphasis in Communication provides the student with an understanding of communication strategies, reasoning, logic, and critical analysis as it relates to public and interpersonal communication, and the interrelationship of mass media and society. In addition to the foundational Communication courses, students select either an Performance Studies or Intercultural Communications track.

**Core/Required Courses (12 units)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 1A</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 1AH</td>
<td>Public Speaking - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 26</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 26H</td>
<td>Interpersonal Communication - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 100</td>
<td>Mass Media and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 1B</td>
<td>Intermediate Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 20</td>
<td>Argumentation and Debate</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 20H</td>
<td>Argumentation and Debate - Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**PLUS**

Choose one (1) of the following tracks:

**Performance Studies Track** (6 additional units selected from the following):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 3</td>
<td>Voice and Diction</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 4</td>
<td>Oral Interpretation of Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 5</td>
<td>Readers Theater</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 1B</td>
<td>Intermediate Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 15A</td>
<td>Forensics</td>
<td>2.0</td>
</tr>
<tr>
<td>SPCH 15B</td>
<td>Forensics</td>
<td>2.0</td>
</tr>
<tr>
<td>THTR 11</td>
<td>Principles of Acting I</td>
<td>3.0</td>
</tr>
<tr>
<td>THTR 12</td>
<td>Principles of Acting II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Intercultural Track** (6 additional units selected from the following):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 7</td>
<td>Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 20</td>
<td>Sociology of Ethnic Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 20H</td>
<td>Sociology of Ethnic Relations - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 15</td>
<td>Major World Religions</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 15H</td>
<td>Major World Religions - Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units 18.0**

### Associate of Arts Degree in Liberal Arts and Sciences

**Emphasis in Fine Arts**

An emphasis in Fine Arts provides the student with an understanding of the practices and theories of traditional and contemporary two and three-dimensional studio arts and an introduction to the history of western art. In addition to the foundation courses, students select studio electives.

**Core/Required Courses (24 units)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTD 15A</td>
<td>Drawing: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 17A</td>
<td>Drawing: Life</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 20</td>
<td>Design: Two Dimensional</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 21</td>
<td>Design: Color and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 22</td>
<td>Design: Three-Dimensional</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 25A</td>
<td>Painting: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>AHS 4</td>
<td>History of Western Art: Prehistoric Through Gothic</td>
<td>3.0</td>
</tr>
<tr>
<td>AHS 4H</td>
<td>History of Western Art: Prehistoric Through Gothic - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>AHS 5</td>
<td>History of Western Art: Renaissance Through Modern</td>
<td>3.0</td>
</tr>
<tr>
<td>AHS 5H</td>
<td>History of Western Art: Renaissance Through Modern - Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units 24.0**

**Recommended two studio electives**

(6 units selected from the following):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIM 101</td>
<td>Drawing - Gesture and Figure</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTB 14</td>
<td>Basic Studio Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTC 165</td>
<td>Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTC 70</td>
<td>Computer Graphics: Introduction</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 16</td>
<td>Drawing: Perspective</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 15B</td>
<td>Drawing: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 17B</td>
<td>Drawing: Life</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 27</td>
<td>Painting: Watercolor</td>
<td>3.0</td>
</tr>
</tbody>
</table>
### Associate of Arts Degree in Liberal Arts and Sciences

**Emphasis in Humanities**

An emphasis in Humanities provides the student with an understanding of the interrelationship between art, religion, history, music, literature and the dramatic arts, and philosophical and political thought. This emphasis also strengthens the understanding of other cultures through the study of a foreign language.

Select a total of 18 units choosing courses from at least 5 of the following 7 categories:

**Music:**
- **MUS 11A** Music Literature Survey 3.0
- **MUS 11B** Music Literature Survey 3.0
- **MUS 12** History of Jazz 3.0
- **MUS 13** Introduction to Music Appreciation 3.0
- **MUS 14A** World Music 3.0
- **MUS 14B** American Folk Music 3.0
- **MUS 15** Rock Music History and Appreciation 3.0

**Art History:**
- **AHIS 3** History of Women and Gender in Art or
- **AHIS 3H** History of Women and Gender in Art - Honors
- **AHIS 4** History of Western Art: Prehistoric Through Gothic or
- **AHIS 4H** History of Western Art: Prehistoric Through Gothic - Honors
- **AHIS 5** History of Western Art: Renaissance Through Modern

**Philosophy and Political Science:**
- **PHIL 12** Ethics 3.0 or
- **PHIL 12H** Ethics - Honors 3.0
- **PHIL 20A** History of Western Philosophy 3.0
- **PHIL 20B** History of Western Philosophy 3.0
- **POLI 5** Political Science Theory 3.0
- **POLI 9** Introduction to International Relations 3.0

**English and Dramatic Arts Literature:**
- **FRCH 60** French Culture Through Cinema 3.0 or
- **ITAL 60** Italian Culture Through Cinema 3.0
- **LIT 10** Survey of Shakespeare 3.0 or
- **LIT 11A** World Literature 3.0 or
- **LIT 11B** World Literature 3.0 or
- **LIT 15** Introduction to Cinema 3.0 or
- **SPCH 4** Oral Interpretation of Literature 3.0
- **THTR 10** History of Theater Arts 3.0

**Religion and Literature:**
- **PHIL 15** Major World Religions 3.0 or
- **PHIL 15H** Major World Religions - Honors 3.0
- **LIT 36** Introduction to Mythology 3.0 or
- **LIT 46** The Bible as Literature: Old Testament 3.0 or
- **LIT 47** The Bible as Literature: New Testament 3.0

**History:**
- **HIST 3** History of World Civilization 3.0 or
- **HIST 3H** History of World Civilization 3.0

### Foreign Languages:

- **CHIN 2** Continuing Elementary Chinese and
- **FRCH 2** Continuing Elementary French and
- **GERM 2** Continuing Elementary German and
- **ITAL 2** Continuing Elementary Italian and
- **ITTL 2** Intermediate Italian 4.0 or
- **JAPN 2** Continuing Elementary Japanese and
- **SPAN 11** Intermediate Spanish 4.0 or
- **SPAN 12** Continuing Spanish 4.0 or
- **SPAN 2** Continuing Elementary Spanish 4.0 or
- **SPAN 3** Intermediate Spanish 4.0 or

**Recommended Electives:**
- **HUMA 1** The Humanities 3.0
- **STDV 100** Student Achievement and Fundamentals of Learning

### Associate of Arts Degree in Liberal Arts and Sciences

**Emphasis in Information Technology**

An emphasis in Information Technology provides the student with an understanding of software development, database technologies, operating systems, networks, and network security.

**Information Technology Basics**

(3.5 - 4 units from the following):
- **CISP 11** Computer Information Systems 3.5
- **CISP 15** Microcomputer Applications 4.0
- **COMP 12** Office Computer Applications 4.0

**Software Development**

(4 units selected from the following):
- **CISP 11** Programming in Visual Basic 4.0
- **CISP 21** Programming in Java 4.0
- **CISP 31** Programming in C++ 4.0
- **CISP 41** Programming in C# 4.0
- **CISW 21** Secure Client Side 4.0
- **CISW 24** Secure Server Side 4.0
- **CISW 25** Web Programming 4.0

**Database Technology**

(4 units selected from the following):
- **CISD 11** Database Management – Microcomputers 4.0
- **CISD 21** SQL Server 4.0
- **CISD 31** Database Management 4.0

**Operating Systems and Networking**

(4 units selected from the following):
- **CISN 11** Telecommunications/Networking 4.0
- **CISN 21** Windows Operating System 4.0
- **CISN 31** Linux Operating System 4.0

**Security**

(4 units selected from the following):
- **CISS 13** Principles of Information Systems Security 4.0

**Total Units: 19.5 – 20.0 for Area of Emphasis**

**Recommended Electives:**
- **CISP 11** Systems Analysis and Design 3.5
- **COMP 11** Internet Research for Business 2.0
- **COMP 20** Word for the Business Professional 4.0
- **COMP 50** Desktop Presentations using PowerPoint 4.0
Programs Leading to an Associates Degree

Associate of Arts Degree in Liberal Arts and Sciences

Emphasis in Kinesiology and Wellness

An emphasis in Kinesiology and Wellness provides the student with an understanding of physical education, health promotion, and the mechanics of human body movement. In addition to the foundational physical education and movement courses, students select courses from a scientific and nutrition and a behavioral development and diversity cluster.

**Cluster 1: Physical Education and Movement**

- PE 3 First Aid and CPR 3.0
- PE 5 Advanced First Aid/CPR/Emergency Response 3.0
- PE 13 Sports Officiating 3.0
- PE 17 Introduction to Physical Education 3.0
- PE 19 Introduction to Care/Prevention of Activity-Sports-Related Injuries 3.0
- PE 34 Fitness for Living 3.0
- PE 39 Techniques of Fitness Testing 2.0
- PE 44 Theory of Coaching 3.0
- DN-T 18 Introduction to Dance 3.0
- DN-T 20 History and Appreciation of Dance 3.0

**Cluster 2: Scientific and Nutritional Background**

- ANAT 10A Introductory Human Anatomy 4.0
- ANAT 10B Introductory Human Physiology 4.0
- ANAT 36 Human Physiology 5.0
- CHEM 10 Chemistry for Allied Health Majors 4.0
- CHEM 40 Introduction to General Chemistry 4.0
- MICR 1 Principles of Microbiology 5.0
- MICR 22 Microbiology 4.0
- PHYS 1 Physics 4.0
- PHYS 2AG General Physics 4.0
- PSYC 1B Biological Psychology 3.0
- BIOL 1 General Biology 4.0
- BIOL 5 Contemporary Health Issues 3.0
- BIOL 13 Human Reproduction, Development and Aging 3.0
- NF 10 Nutrition for Personal Health and Wellness 3.0
- NF 25 Essentials of Nutrition 3.0
- PSYC 1A Introduction to Psychology 3.0
- PSYC 26 Psychology of Sexuality 3.0
- PSYC 3 Introduction to Research Methods in Psychology 4.0
- PSYC 17 Introduction to Human Services 3.0
- PSYC 33 Psychology for Effective Living 3.0
- SOC 1 Sociology 3.0
- SOC 1H Sociology - Honors 3.0
- SOC 2 Sociology 3.0
- SOC 2H Sociology - Honors 3.0
- SOC 20 Sociology of Ethnic Relationships 3.0
- SOC 20H Sociology of Ethnic Relations - Honors 3.0
- COUN 2 College Success Strategies 3.0
- COUN 5 Career/Life Planning 3.0
- Plus additional units taken from any courses in Clusters 1-3 above for a total of at least 18 units.

**Total Units for Area of Emphasis** 18.0

**Strongly Recommended:**

Students who are getting the AA degree with an emphasis in Kinesiology and Wellness are encouraged to take a minimum of three activity courses in at least three different PE/DANCE areas: PE-A (Aquatics); PE-F (Fitness); PE-I (Individual Sports); PE-S (Team Sports); DNCE (Dance).

**Associate of Arts Degree in Liberal Arts and Sciences**

**Emphasis in Language Arts**

An emphasis in Language Arts provides the student with an understanding of the acquisition of language with a focus on reading, writing, listening, and speaking within a diverse environment. In addition to the foundational language acquisition courses, students select personal options that will strengthen their individual interests and goals within Language Arts.

**Language Acquisition** (minimum 9 units selected from the following):

- CHLD 51 Early Literacy 3.0
- CHLD 52 Methods in Reading 3.0
- ENGL 1C Critical Thinking and Writing 4.0
- ENGL 81 Language Acquisition 3.0
- READ 100 Analysis and Critical Reading 3.0
- READ 110 Reading Tutoring for Elementary Students Through Service Learning 3.0
- SIGN 210 American Sign Language Structure 3.0
- STUDY 100 Student Achievement and Fundamentals of Learning 3.0

**Language Arts and Diversity** (minimum 6 units selected from the following):

- SPAN 1 Elementary Spanish 4.0
- SPAN 2 Continuing Elementary Spanish 4.0
- SPAN 3 Intermediate Spanish 4.0
- SPAN 4 Continuing Intermediate Spanish 4.0
- SPAN 5 Advanced Spanish 4.0
- SPAN 6 Continuing Advanced Spanish 4.0
- SPAN 11 Spanish for the Spanish Speaking 4.0
- SPAN 12 Spanish for the Spanish Speaking 4.0
- SPAN 25 Spanish Literature 3.0
- SPAN 53 Conversational Spanish 3.0
- SPAN 54 Conversational Spanish 3.0
- SPAN 40 Language Acquisition 4.0
- LIT 3 Multicultural American Literature 3.0
- LIT 11A World Literature 3.0
- LIT 119 World Literature 3.0
- LIT 20 African American Literature 3.0
- LIT 25 Contemporary Mexican American Literature 3.0
- LIT 33 Images of Women in Literature 3.0

**Strongly Recommended:**

Students who are getting the AA degree with an emphasis in Language Arts are encouraged to take a minimum of three activity courses in at least three different PE/DANCE areas: PE-A (Aquatics); PE-F (Fitness); PE-I (Individual Sports); PE-S (Team Sports); DNCE (Dance).
SELECTEDrequired and recommended courses in the following categories  (3-4 units selected from the following):  

**Programs Leading to an Associates Degree**

**Associate of Arts Degree in Liberal Arts and Sciences**

Emphasis in Social & Behavioral Sciences

An emphasis in Social & Behavioral Sciences provides the student with an understanding of statistics, cultural and gender diversity, the development of the person, and biology as it relates to behavior or society.

Cluster 1: Statistics Background  

- MATH 110 Elementary Statistics  
  
Cluster 2: Cultural & Gender Diversity  

- ANTH 30 The Native American  
- ANTH 5 Principles of Cultural Anthropology  
- MUS 2 Introduction to Music Technology  

**Associate of Arts Degree in Liberal Arts and Sciences**

Emphasis in Natural Sciences

An emphasis in Natural Sciences provides the student with an understanding of living and non-living systems and promotes an appreciation of the methodologies and tools of science. Students may select courses that focus on a specific major and then select complementary courses to strengthen their selected focus or they may select courses that strengthen and broaden their overall understanding of the Natural Sciences.

Cluster 1: Statistics Background  

- MATH 110 Elementary Statistics  
- MATH 110H Elementary Statistics - Honors  
- PSYC 10 Statistics  

Cluster 2: Cultural & Gender Diversity  

- ANTH 30 The Native American  
- ANTH 5 Principles of Cultural Anthropology  
- MUS 2 Introduction to Music Technology  

**Associate of Arts Degree in Liberal Arts and Sciences**

Emphasis in Music

An emphasis in Music provides the student with an understanding of music theory, harmony, and the history of western music. In addition to the foundational Music courses, students select courses in piano and a performance ensemble.

**Core/Required Courses (15 units)**

- MUS 2 Music Theory  
- MUS 3A Harmony  
- MUS 5A Musicianship  
- MUS 5B Musicianship  
- MUS 11A Music Literature Survey  
- MUS 16 Individual Instruction  
- MUS 22 Conducting  
- MUS 17A Elementary Class Piano  
- MUS 17B Intermediate Class Piano  

**Emphasis in German**

An emphasis in German provides the student with an understanding of the German language and culture. Students may select courses that focus on specific themes and topics, ranging from literature and history to current events.

Cluster 1: Literature & History  

- GERM 1 Elementary German  
- GERM 1H Elementary German - Honors  

Cluster 2: Culture & Diversity  

- GERM 20 German Literature  
- GERM 21 German American History  

**Associate of Arts Degree in Liberal Arts and Sciences**

Emphasis in French

An emphasis in French provides the student with an understanding of the French language and culture. Students may select courses that focus on specific themes and topics, ranging from literature and history to current events.

Cluster 1: Literature & History  

- FREN 1 Elementary French  
- FREN 1H Elementary French - Honors  

Cluster 2: Culture & Diversity  

- FREN 20 French Literature  
- FREN 21 French American History  

**Associate of Arts Degree in Liberal Arts and Sciences**

Emphasis in Spanish

An emphasis in Spanish provides the student with an understanding of the Spanish language and culture. Students may select courses that focus on specific themes and topics, ranging from literature and history to current events.

Cluster 1: Literature & History  

- SPAN 1 Elementary Spanish  
- SPAN 1H Elementary Spanish - Honors  

Cluster 2: Culture & Diversity  

- SPAN 20 Spanish Literature  
- SPAN 21 Spanish American History  

**Associate of Arts Degree in Liberal Arts and Sciences**

Emphasis in Russian

An emphasis in Russian provides the student with an understanding of the Russian language and culture. Students may select courses that focus on specific themes and topics, ranging from literature and history to current events.

Cluster 1: Literature & History  

- RUSS 1 Elementary Russian  
- RUSS 1H Elementary Russian - Honors  

Cluster 2: Culture & Diversity  

- RUSS 20 Russian Literature  
- RUSS 21 Russian American History  

Section 8
### Programs Leading to an Associates Degree

**Cluster 3: Development of the Person**  
(minimum of 3 units selected from the following):  
- BIO 5 Contemporary Health Issues 3.0  
- BIO 13 Human Reproduction, Development and Aging 3.0  
- CHLD 1 Child, Family and Community 3.0  
- CHLD 10 Child Growth and Development 3.0  
- CHLD 10H Child Growth and Development - Honors 3.0  
- PSYCH 14 Developmental Psychology 3.0  
- SOC 2 Sociology 3.0  
- SOC 2H Sociology - Honors 3.0  
- SOC 4 Introduction to Gerontology 3.0  
- SOC 15 Child Development 3.0

**Cluster 4: Biology as it Relates to Behavior or Society**  
(minimum of 3 units selected from the following):  
- ANTH 1 Biological Anthropology 3.0  
- BIOL 6 Humans and the Environment 3.0  
- BIOL 17 Neurobiology and Behavior 3.0  
- PSYC 1B Biological Psychology 3.0  
- Plus additional units taken from any courses in Clusters 2-4 above for a total of at least 18 units.  
**Total Units 18.0 for Area of Emphasis**

Students who decide to major in the Social and Behavioral Sciences are strongly encouraged to gain a strong research methods background by taking PSYC 3 Introduction to Research Methods in Psychology 4.0 or LIBR 1 Information Resources and Research Methods 3.0.

**Other recommended electives include:**  
- ANTH 3 Archaeology 3.0  
- BUSM 60 Human Relations in Business 3.0  
- FCS 41 Life Management 3.0  
- COUN 5 Career/Life Planning 3.0  
- COUN 51 Career Planning - Honors 1.0  
- CHLD 1 Child, Family and Community 3.0  
- CHLD 73 Infant/Toddler Care and Development 3.0  
- CHLD 85 Infants At Risk 3.0  
- LIT 15 Introduction to Cinema 3.0  
- LIT 20 African American Literature 3.0  
- LIT 25 Contemporary Mexican American Literature 3.0  
- LIT 3 Multicultural American Literature 3.0  
- PSYC 17 Introduction to Human Services 3.0  
- PSYC 19 Abnormal Psychology 3.0  
- PSYC 33 Psychology for Effective Living 3.0  
- SPCH 26 Interpersonal Communication 3.0  
- SPCH 26H Interpersonal Communication - Honors 3.0  
- SL 1 Service Learning/Seminar for Health Occupations 6.0  
- SL 2 Linked Service Learning 1.0  
- SL 3 Service Learning/Seminar in Community Involvement 3.0  
- SL 4 Service Learning and Community 1.0
Section 9
Transferring to California Colleges and Universities
Transferring to California Colleges and Universities

PROGRAMS OF STUDY LEADING TO TRANSFER

Mt. San Antonio College offers lower division transfer courses to meet the requirements for most baccalaureate majors offered by accredited colleges and universities in the United States. Students should meet with a counselor or an educational advisor in the Student Services Center for information about transfer courses in their major. It is advised that the student visit the Counseling and Advising Services in advance of the next registration period.

Students should develop an educational plan by the end of their second semester. Students with declared majors are encouraged to consult with an educational advisor or a counselor in Counseling and Advising Services. Students who are undecided are encouraged to see a counselor or enroll in COUN 5 – Career/Life Planning.

Listed below are majors that may be offered at various campuses of the California State University (CSU) and/or the University of California (UC). Although a serious attempt was made to make this list a comprehensive one, it is not an exact list of every major available. To find out exactly what major is available at any particular university, please visit Counseling and Advising Services. All of the CSU and UC catalogs are available in the Career and Transfer Center for your use. If you are undecided about which major is right for you, please make an appointment with a counselor in the Counseling Center, Ext. 4380.

Students who are preparing to transfer, especially to a UC campus, are strongly encouraged to balance their studies by taking both general education courses and lower division (freshman/sophomore) major courses. Completing only general education courses, especially for high unit majors, such as business administration, natural sciences, math or engineering, may not be in a student’s best interest. Additional coursework may be completed as elective courses, to complement or supplement, a major course of study.

Liberal Arts
- Social Sciences
  - Anthropology
  - Behavioral Sciences
  - Child Development
  - Cultural Geography
  - Economics
  - Ethnic and Area Studies
  - Asian Studies
  - Chicana/Chicana Studies
  - Comparative Cultures
  - European Studies
  - Latin American Studies
  - Middle Eastern Studies
  - Native American Studies
  - Third World Studies
  - History
  - Human Development
  - Law and Society
  - Legal Studies
  - Peace and Conflict Studies
  - Political Science
  - Psychology
- Natural Sciences & Math
  - Life Sciences
    - Biological Sciences
    - Animal Physiology
    - Biochemistry
    - Biomedical Sciences
    - Botany
    - Ecology
    - Environmental Biology
    - Genetics
    - Integrative Biology
    - Marine Biology
    - Microbiology
    - Molecular Biology
    - Zoology
    - Health Sciences
- Physical Sciences
  - Astrophysics
  - Atmospheric Sciences
  - Chemistry
  - Earth Science
  - Geophysics
  - Geology
  - Oceanography
  - Physical Geography
  - Physical Sciences
  - Physics
  - Soil/Water Sciences
- MATH
  - Mathematics
  - Statistics
  - Quantitative Methods
- Agriculture/Natural Resources/Environment
  - Agricultural Management
  - Agriculture
  - Animal Science
  - Bio-resources
  - Conservation
  - Entomology
  - Environmental Biology/Toxicology Fisheries
  - Environmental Science/Studies
  - Food Science
  - Forestry
  - Natural Resources Management
  - Environmental Biology/Conservation
- Environmental Biology/Conservation
  - Agriculture
  - Agriculture/Natural Resources/Environment
  - Agricultural Management
  - Agricultural Technology
  - Animal Science
  - Bio-resources
  - Conservation
  - Entomology
  - Environmental Biology/Toxicology Fisheries
  - Environmental Science/Studies
  - Food Science
  - Forestry
  - Natural Resources Management
  - Environmental Biology/Conservation
- Business
  - Accounting
  - Finance
  - Human Resources Management
  - Information Systems
  - International Business
  - Management
  - Marketing
  - Communication
  - Advertising
- Communication Studies
  - Film Studies
  - Journalism
  - Mass Communication
  - Motion Picture – Television
  - Photography
  - Photo – Journalism
  - Public – Relations
  - Radio – Television Services
- Services
  - Communicative Disorders
  - Counseling
  - Criminal Justice
  - Deaf Studies
  - Dental Hygiene (UCSF)
  - Fire Protection Administration
  - Government/Public Service
  - Health Care Management
  - Human Services
  - Liberal Studies
  - Library Science
  - Medical Lab Technology
  - Nursing
  - Nutrition
  - Occupational Therapy
  - Physical Education
  - Public Health
  - Radiologic Technology
  - Recreation Administration
  - Rehabilitation
  - Social Work

UNIVERSITY TRANSFER MAJOR OPTIONS (continued)
THE CALIFORNIA STATE UNIVERSITY
Lower Division Transfer Admission Requirements
Some campuses restrict enrollment of lower-division transfer students. California residents may be eligible for CSU admission with fewer than 60 transferable semester units (90 quarter units) if they:
- Have a college grade point average of 2.00 or better in all transferable college units attempted.
- Are in good standing at the last college or university attended, i.e., are eligible to re-enroll.
- Meet the admission requirements for a first-time freshman or have successfully completed necessary courses to make up the deficiencies you had in high school if you did not complete the 15-unit pattern of college preparatory subjects.
- Meet the eligibility index required of a freshman.

Some campuses may require lower-division transfer students to have completed English composition and general education mathematics prior to transfer. Some campuses do not admit lower-division transfer students.

Contact your campus of choice to determine whether there are admission limits on the number of lower-division transfer students. Students who completed college units before they graduated from high school or during the summer between high school graduation and CSU enrollment are considered first-time freshmen and must meet those admission requirements.

Upper Division Transfer Admission Requirements
Students are eligible for admission with 60 or more transferable semester units (90 quarter units) if they:
- Have a college grade point average of 2.00 or better (2.40 for non-California residents) in all transferable college units attempted.
- Are in good standing at the last college or university attended, i.e., are eligible to re-enroll.
- Have completed or will complete prior to transfer at least 30 semester units (45 quarter units) of courses equivalent to general education requirements with a grade of "C" or better. The 30 units must include all of the general education requirements in communication in the English language (English composition, oral communication, and critical thinking) and at least one course of at least 3 semester units (4 quarter units) required in college-level mathematics.

The above information is from the 2008-2009 California State University (CSU) undergraduate application.
### Transferring to California Colleges and Universities

**CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS 2008-09**

Forty-eight units of general education are required to graduate from campuses of the CSU system. A maximum of 39 units may be certified by community colleges; nine units must be taken at the upper division level. Acceptable courses are grouped in five areas, A through E. A maximum of 30 units may be certified from Areas B through D collectively. The list of certifiable courses will be subject to change year by year, but students are assured that courses taken to meet General Education-Breadth Requirements will be honored if they are on the list during the year taken. The following program is structured so that a student who completes the program will be assured of properly meeting the General Education-Breadth Requirements of CSU. Area A and Mathematics must be completed with a minimum grade of “C.” Students who have attended other colleges are urged to consult with a counselor or educational advisor for advice on satisfying General Education-Breadth Requirements.

**Courses, with at least one advising S**: The following program is structured so that a student who completes the program will be assured of properly meeting the General Education-Breadth Requirements of CSU. Area A and Mathematics must be completed with a minimum grade of “C.” Students who have attended other colleges are urged to consult with a counselor or educational advisor for advice on satisfying General Education-Breadth Requirements.

**The requirements listed below are for the 2008-2009 academic year and are based upon information available at the time of catalog publication. Students may contact the Counseling and Advising Services for most current information at (909) 594-5611, ext. 4293.**

**B-1: Physical Science**
- Select at least one course from the following list:
  - AGOR 1 Horticultural Science
  - ANAT 10A A Taxonomic Course in Biology
  - ANAT 10B Introductory Human Physiology
  - ANAT 35 Human Anatomy
  - ANAT 36 Human Physiology
  - ANTH 1 Biological Anthropology
  - ANTH 1H Biological Anthropology -- Honors
  - ANTH 2 Biological Anthropology Laboratory
  - BIOL 1 General Biology
  - BIOL 2 Plant and Animal Biology
  - BIOL 3 Ecology and Field Biology
  - BIOL 4 Biology for Majors
  - BIOL 4H Biology for Majors -- Honors
  - BIOL 6 Humans and the Environment
  - BIOL 6L Humans and the Environment Laboratory
  - BIOL 17 Neurobiology and Behavior
  - BIOL 20 Marine Biology
  - BIOL 21 Marine Biology Laboratory
  - MICRO 1 Principles of Microbiology
  - MICRO 22 Microbiology
  - PSYC 1B Biological Psychology

**B-2: Life Science**
- Select at least one course from the following list:
  - BUSC 17 Environmental Science
  - MATH 100 Survey of College Mathematics
  - MATH 110 Pre-Calculus Mathematics
  - MATH 110H Pre-Calculus Mathematics -- Honors
  - MATH 120 Finite Mathematics
  - MATH 130 College Algebra
  - MATH 140 Calculus for Business
  - MATH 150 Trigonometry
  - MATH 160 Precalculus Mathematics
  - MATH 180 Calculus and Analytic Geometry
  - MATH 181 Calculus and Analytic Geometry
  - MATH 182 Calculus and Analytic Geometry
  - MATH 285D Linear Algebra and Differential Equations
  - PSYC 10 Statistics for the Behavioral Sciences

**Area C**
- Arts, Literature, Philosophy and Foreign Languages (9 units)
  - Select three courses, with at least one course from "Arts" and one course from "Humanities":

**C-1: Arts**
- AHS 1 Understanding the Visual Arts
- AHS 1H Understanding the Visual Arts -- Honors
- AHS 2 Topics in Visual Art and Culture
- AHS 2H Topics in Visual Art and Culture -- Honors
- AHS 3 History of Women and Gender in Art
- AHS 3H History of Women and Gender in Art -- Honors
- AHS 4 History of Western Art: Prehistoric Through Gothic
- AHS 4H History of Western Art: Prehistoric Through Gothic -- Honors
- AHS 5 History of Western Art: Renaissance Through Modern
- AHS 5H History of Western Art: Renaissance Through Modern -- Honors
- AHS 6 History of Modern Art
- AHS 6H History of Modern Art -- Honors
- AHS 9 History of Asian Art
- AHS 10 A History of Greek and Roman Art and Architecture
- AHS 11 History of African, Oceanic and Native American Art
- AHS 12 History of Pre-Columbian Art
- AHS 12H History of Pre-Columbian Art -- Honors
- ARCH 1 World Architecture I
- ARCH 2 World Architecture II
- ARTB 14 Basic Studio Arts
- ARTB 15A Drawing: Beginning
- ARTB 20 Design: Two Dimensional
- ARTB 25A Painting: Beginning
- ARTB 20 Art, Artists and Society
- ARTS 22 Design: Three Dimensional
- ARTS 30A Ceramics: Beginning
- ARTS 40A Sculpture: Beginning
- DM-T 20 History and Appreciation of Dance
- ID 180 History of Interior Architecture and Furnishings I
- MUS 7 Fundamentals of Music
- MUS 11A Music Literature Survey
- MUS 11B Music Literature Survey

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### Area A

**The English Language and Critical Thinking (9 units)**
Select one course from each group:

- **A-1: Oral Communication:**
  - SPCH 1A Public Speaking
  - SPCH 1AH Public Speaking -- Honors

- **A-2: Written Communication:**
  - ENGL 1A Freshman Composition
  - ENGL 1AH Freshman Composition -- Honors

- **B-3: Lab Science**
  - GEOG 1H Elements of Physical Geography -- Honors
  - GEOG 1L Physical Geography Laboratory -- Honors
  - GEOL 1H Elements of Physical Geography -- Honors
  - GEOL 1L Physical Geography Laboratory -- Honors
  - GEOL 20 Marine Biology
  - GEOL 21 Marine Biology Laboratory
  - GEOL 22 Marine Biology Laboratory
  - GEOL 24 Marine Biology Laboratory
  - GEOL 25 Marine Biology Laboratory
  - PSYC 1B Biological Psychology
  - PSYCH 1B Biological Psychology

### Area C

- **Arts, Literature, Philosophy and Foreign Languages (9 units)**
  - Select three courses, with at least one course from "Arts" and one course from "Humanities":

**C-1: Arts**
- AHS 1 Understanding the Visual Arts
- AHS 1H Understanding the Visual Arts -- Honors
- AHS 2 Topics in Visual Art and Culture
- AHS 2H Topics in Visual Art and Culture -- Honors
- AHS 3 History of Women and Gender in Art
- AHS 3H History of Women and Gender in Art -- Honors
- AHS 4 History of Western Art: Prehistoric Through Gothic
- AHS 4H History of Western Art: Prehistoric Through Gothic -- Honors
- AHS 5 History of Western Art: Renaissance Through Modern
- AHS 5H History of Western Art: Renaissance Through Modern -- Honors
- AHS 6 History of Modern Art
- AHS 6H History of Modern Art -- Honors
- AHS 9 History of Asian Art
- AHS 10 A History of Greek and Roman Art and Architecture
- AHS 11 History of African, Oceanic and Native American Art
- AHS 12 History of Pre-Columbian Art
- AHS 12H History of Pre-Columbian Art -- Honors
- ARCH 1 World Architecture I
- ARCH 2 World Architecture II
- ARTB 14 Basic Studio Arts
- ARTB 15A Drawing: Beginning
- ARTB 20 Design: Two Dimensional
- ARTB 25A Painting: Beginning
- ARTB 20 Art, Artists and Society
- ARTS 22 Design: Three Dimensional
- ARTS 30A Ceramics: Beginning
- ARTS 40A Sculpture: Beginning
- DM-T 20 History and Appreciation of Dance
- ID 180 History of Interior Architecture and Furnishings I
- MUS 7 Fundamentals of Music
- MUS 11A Music Literature Survey
- MUS 11B Music Literature Survey
**CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS 2008-09**

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<thead>
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<th>Area D</th>
<th>Social, Political, and Economic Institutions and Behavior; Historical Background</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Required Courses: Minimum 9 units with courses from at least two disciplines (D0 – D9);</td>
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<tr>
<td></td>
<td><strong>D-0: Sociology &amp; Criminology</strong></td>
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<tr>
<td></td>
<td><strong>CHILD 1</strong> Child, Family, School and Community</td>
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<tr>
<td></td>
<td><strong>SOC 1</strong> Sociology</td>
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<tr>
<td></td>
<td><strong>SOC 1H</strong> Sociology – Honors</td>
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<tr>
<td></td>
<td><strong>SOC 2</strong> Sociology</td>
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<tr>
<td></td>
<td><strong>SOC 2H</strong> Sociology – Honors</td>
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<tr>
<td></td>
<td><strong>SOC 4</strong> Introduction to Gerontology</td>
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<td><strong>SOC 5</strong> Introduction to Criminology</td>
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<td><strong>SOC 14</strong> Marriage and the Family</td>
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<td><strong>SOC 15</strong> Child Development</td>
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<tr>
<td></td>
<td><strong>SOC 20</strong> Sociology of Ethnic Relations</td>
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<td></td>
<td><strong>SOC 20H</strong> Sociology of Ethnic Relations – Honors</td>
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<tr>
<td></td>
<td><strong>D-1: Anthropology &amp; Archeology</strong></td>
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<td><strong>ANTH 3</strong> Archeology</td>
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<td></td>
<td><strong>ANTH 5</strong> Principles of Cultural Anthropology</td>
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<td><strong>ANTH 22</strong> General Cultural Anthropology</td>
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<td></td>
<td><strong>ANTH 30</strong> The Native American</td>
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<td><strong>D-2: Economics</strong></td>
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<td></td>
<td><strong>AGAG 1</strong> Food Production, Land Use and Politics – A Global Perspective</td>
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<td><strong>AGFR 20</strong> Conservation of Natural Resources</td>
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<td></td>
<td><strong>BUSC 1A</strong> Principles of Economics – Macroeconomics</td>
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<td></td>
<td><strong>BUSC 1AH</strong> Principles of Economics – Macroeconomics – Honors</td>
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<td><strong>BUSC 1B</strong> Principles of Economics – Microeconomics</td>
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<td></td>
<td><strong>BUSC 1BH</strong> Principles of Economics – Microeconomics – Honors</td>
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<td></td>
<td><strong>JOUR 100</strong> Mass Media and Society</td>
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<td><strong>D-3: Ethnic Studies</strong></td>
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<td></td>
<td>* <strong>HIST 30</strong> History of the African American</td>
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<td>* <strong>HIST 31</strong> History of the African American</td>
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<td></td>
<td>* <strong>HIST 40</strong> History of the Mexican American</td>
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<td></td>
<td>* <strong>HIST 44</strong> History of Native Americans</td>
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<tr>
<td></td>
<td>* <strong>JOUR 107</strong> Race, Culture, Sex, and Mass Media Images</td>
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<td></td>
<td>* <strong>POLI 25</strong> Politics of the Mexican American</td>
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<tr>
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<td>* <strong>POLI 35</strong> African American Politics</td>
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<td><strong>SOC 20</strong> Sociology of Ethnic Relations</td>
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<td><strong>SOC 20H</strong> Sociology of Ethnic Relations – Honors</td>
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<td><strong>D-4: Gender Studies</strong></td>
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<td></td>
<td>* <strong>PSYC 25</strong> The Psychology of Women</td>
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<td><strong>D-5: Geography</strong></td>
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<td></td>
<td>* <strong>GEOG 2</strong> Human Geography</td>
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<td></td>
<td>* <strong>GEOD 2H</strong> Human Geography – Honors</td>
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<tr>
<td></td>
<td>* <strong>GEOD 5</strong> World Regional Geography</td>
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<td>* <strong>GEOD 6</strong> The Urban World</td>
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<td></td>
<td>* <strong>GEOD 30</strong> Geography of California</td>
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<td><strong>D-6: History</strong></td>
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<td></td>
<td>* <strong>HIST 1</strong> History of the United States</td>
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<td>* <strong>HIST 3</strong> History of the World Civilization</td>
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<td>* <strong>HIST 3H</strong> History of the World Civilization – Honors</td>
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<td>* <strong>HIST 4</strong> History of World Civilization</td>
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<td></td>
<td>* <strong>HIST 4H</strong> History of World Civilization – Honors</td>
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<tr>
<td></td>
<td>* <strong>HIST 7</strong> History of the United States</td>
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<tr>
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<td>* <strong>HIST 7H</strong> History of the United States – Honors</td>
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<td>* <strong>HIST 8</strong> History of the United States</td>
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<td></td>
<td>* <strong>HIST 8H</strong> History of the United States – Honors</td>
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<tr>
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<td>* <strong>HIST 10</strong> History of Asia</td>
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<td>* <strong>HIST 11</strong> History of Asia</td>
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</tbody>
</table>

**Attention:** It is recommended that you use one of the options below as part of the 9 units required in Area D.

**CSU AMERICAN INSTITUTIONS & U.S. HISTORY GRADUATION REQUIREMENT:**

Option 1: HIST 7 (or 7H) + HIST 8 (or 8H) If Option #1 is selected, DO NOT select another D6 course as your third Area D course.

Option 2: Completion of one course from U.S. History plus one course from American Institutions:

<table>
<thead>
<tr>
<th>United States History</th>
<th>American Institutions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1</td>
<td>POLI 1</td>
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<td>HIST 7</td>
<td>POLI 25</td>
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<td>HIST 7H</td>
<td>HIST 31</td>
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<td>HIST 40</td>
<td>POLI 1H</td>
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<tr>
<td>HIST 3</td>
<td>POLI 3</td>
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</tbody>
</table>

The two courses chosen from Option 1 or Option 2 may be used as part of the 9 units for AREA D.
TRANSFERRING TO CALIFORNIA COLLEGES AND UNIVERSITIES

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS 2008-09

* HIST 19 History of Mexico
* HIST 30 History of the African American
* HIST 31 History of the African American
* HIST 35 History of Africa
* HIST 36 Women in American History – Beyond the Stereotypes
* HIST 39 California History
* HIST 40 History of the Mexican American
* HIST 44 History of Native Americans

D-7: Interdisciplinary Social or Behavioral
* CHILD 10 Child Growth and Development
* CHILD 10H Child Growth and Development – Honors
SPCH 7 Intercultural Communication
SPCH 26 Interpersonal Communication
SPCH 26H Interpersonal Communication – Honors

D-8: Political Science, Government, and Legal Institutions
POLI 1 Political Science
POLI 1H Political Science – Honors
POLI 2 Political Science
POLI 5 Political Science Theory
POLI 9 Introduction to International Relations
POLI 25 Politics of the Mexican American
POLI 35 African American Politics

D-9: Psychology
PSYC 1A Introduction to Psychology
PSYC 1AH Introduction to Psychology – Honors
PSYC 14 Developmental Psychology
PSYC 19 Abnormal Psychology
* PSYC 25 The Psychology of Women

Notes
1. Upper division transfer students (60 - 70 semester baccalaureate units), will need to have at least 30 semester units of general education. Within those 30 units, Area A (9) semester units and Mathematics (3) semester units must be completed with grades of ‘C’ or better.
2. CSULA transfer students are advised to complete ENGL 1C or ENGL 1CH as part of the Area A requirements. CSULA requires completion of ENGL 102 (ENGL 1C or 1CH) as a prerequisite to UNIV 400 (Writing Proficiency Examination).
3. Courses on this list have been approved by the CSU Office of the Chancellor for Fall 2008 and beyond. If a course was completed prior to approval, it cannot be certified for CSU General Education–Breadth requirements.
4. Some majors at CSU do not allow double counting of major preparation courses and general education requirements. Students are advised to consult with a counselor or advisor to determine if courses can be double counted.
5. Some majors require specific general education courses. Students planning to transfer are advised to plan their schedules carefully in order to maintain progress.

* Courses may not be double counted to satisfy more than one area, even if a course is listed in more than one area.
THE UNIVERSITY OF CALIFORNIA

UC Minimum Admission Requirements

There are several ways to meet the University's minimum admission requirements for transfer students, as described below. The path you use depends on the degree to which you satisfied UC's minimum eligibility requirements for freshmen, at the time you graduated from high school. In all cases, you must have at least a “C” (2.0) grade point average in all transferable coursework. If you need assistance in determining whether you met the requirements, contact an educational advisor in Counseling and Advising Services.

Minimum Admission Requirements for California Residents Transferring to UC

1. If you were eligible for admission to the University when you graduated from high school – meaning you satisfied the Subject, Scholarship, and Examination Requirements, or were identified by the University during your senior year in high school as eligible in the Local Context – you are eligible for transfer if you have a 2.0 GPA in your transferable coursework.

2. If you met the Scholarship Requirement in high school but did not satisfy the Subject Requirement, you must take transferable college courses in the missing subjects, earn a “C” or better in each required course, and maintain a 2.0 GPA in all transferable coursework to be eligible to transfer.

3. If you were not eligible for admission to the University when you graduated from high school because you did not meet the Scholarship Requirement, you must:

   A. Complete 60 semester units (or 90 quarter units) of transferable college credit with at least a 2.4 GPA. No more than 14 semester units may be taken credit/no credit.

   B. Complete the following course pattern requirement, earning a grade of “C” or better in each course:

      • two transferable college courses (3 semester or 4-5 quarter units each) in English composition;
      • one transferable college course (3 semester or 4-5 quarter units) in mathematical concepts and quantitative reasoning;
      • four transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences.

Students who satisfy the Intersegmental General Education Transfer Curriculum (IGETC) prior to transferring to UC may satisfy Option 3B of the transfer admission requirements.
**Transferring to California Colleges and Universities**

**INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC) 2008-09**

Completion of the IGETC will permit a student to transfer from Mt. SAC to a campus in either the University of California (UC) system or California State University (CSU) without the need, after transfer, to take additional lower-division general education courses to satisfy university general education requirements. It should be noted that completion of the IGETC is not an admission requirement for transfer to UC or CSU, nor is it the only way to fulfill the lower-division general education requirements of UC or CSU prior to transfer. Students pursuing majors that require extensive lower-division preparation may not find the IGETC option to be advantageous (i.e., Engineering, Sciences).

The requirements listed below must be completed in their entirety for full certification to the UC and CSU. For students who have completed coursework at multiple campuses, the campus of last attendance prior to transfer to UC or CSU will certify the coursework. Mt. SAC will certify coursework from other campuses according to the IGETC list of the originating campus. Students with Advanced Placement exams which are recognized as equivalent to Mt. SAC courses listed below will obtain credit for IGETC. A minimum grade of "C" is required in each course. (A grade of "C" – is not acceptable.)

Students beginning Fall 2008 must follow 2008-2009 IGETC requirements. Courses are approved for the academic year in which they were completed. Students may obtain a copy from the Counseling and Advising Services.

### Area 1

**English Communication**

Select one course from each group:

- **Group A: English Composition**
  - ENGL 1A Freshman Composition
  - ENGL 1AH Freshman Composition – Honors
- **Group B: Critical Thinking – Composition**
  - ENGL 1C Critical Thinking and Writing
  - ENGL 1CH Critical Thinking and Writing – Honors
- **Group C: Oral Communication**
  - CSU requirements only
  - SPCH 1A Public Speaking
  - SPCH 1AH Public Speaking – Honors

### Area 2

**Mathematical Concepts and Quantitative Reasoning**

Select one course from:

- MATH 100 Elementary Statistics
- MATH 100H Elementary Statistics – Honors
- MATH 110 Finite Mathematics
- MATH 120 College Algebra
- MATH 130 Calculus
- MATH 140 Calculus
- MATH 160 Precalculus
- MATH 180 Calculus and Analytic Geometry
- MATH 181 Calculus and Analytic Geometry
- MATH 200 Calculus and Analytic Geometry
- MATH 285 Linear Algebra and Differential Equations
- PSYC 10 Statistics for the Behavioral Sciences

### Area 3

**Arts and Humanities**

Select three courses minimum, at least one course from the Arts group and one course from the Humanities group:

- **Arts Courses:**
  - AHIS 1 Understanding the Visual Arts, or
  - ARTB 1 Understanding the Visual Arts
  - AHIS 4H History of Western Art: Prehistoric through Gothic
  - AHIS 5H History of Western Art: Renaissance through Modern
  - AHIS 6H History of Modern Art
  - AHIS 12 History of Precolombian Art
  - MUS 15 Rock Music History and Appreciation
  - THTR 10 History of Theater Arts

- **Humanities Courses:**
  - CHIN 3 Intermediate Chinese
  - CHIN 4 Continuing Intermediate Chinese
  - ENGL 1B English – Introduction to Literary Types
  - ENGL 1BH English – Introduction to Literary Types – Honors
  - FREN 3 Intermediate French
  - FREN 4 Continuing Intermediate French
  - HIST 1 History of the United States
  - HIST 2 History of World Civilization
  - HIST 3 History of World Civilization – Honors
  - HIST 4 History of World Civilization – Honors
  - HIST 5 History of Modern Art
  - LIT 10 Survey of Shakespeare
  - LIT 11A Literary Survey
  - LIT 11B Literary Survey
  - LIT 12 Ethics
  - LIT 13 Introduction to Modern Poetry
  - LIT 15 Introduction to Cinema
  - LIT 20 African American Literature
  - LIT 25 Contemporary Mexican American Literature
  - LIT 30 Literature
  - LIT 31 History of the African American
  - LIT 32 World Architecture II
  - LIT 33 Images of Women in Literature
  - LIT 34 Women in American History – Beyond the Stereotypes
  - LIT 35 Introduction to Mythology
  - LIT 36 Mythology
  - LIT 37 Beginning French
  - LIT 38 Beginning French
  - LIT 40 History of the Mexican American
  - LIT 41 History of the Humanities
  - LIT 42 History of the Humanities
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  - LIT 88 History of the Humanities
  - LIT 89 History of the Humanities
  - LIT 90 History of the Humanities

### Additional Courses

- JAPN 3 Intermediate Japanese
- JAPN 4 Continuing Intermediate Japanese
- JAPN 5 Advanced Japanese
- LIT 1 Early American Literature
- LIT 2 Modern American Literature
- LIT 6A Survey of English Literature
- LIT 6B Survey of English Literature
- LIT 10 Survey of Shakespeare
- LIT 11A Literary Survey
- LIT 11B Literary Survey
- LIT 14 Introduction to Modern Poetry
- LIT 15 Introduction to Cinema
- LIT 20 African American Literature
- LIT 25 Contemporary Mexican American Literature
- LIT 28 Introduction to American Literature
- LIT 30 Literature
- LIT 31 History of the African American
- LIT 32 World Architecture II
- LIT 33 Images of Women in Literature
- LIT 34 Women in American History – Beyond the Stereotypes
- LIT 35 Introduction to Mythology
- LIT 36 Mythology
- LIT 37 Beginning French
- LIT 38 Beginning French
- LIT 40 History of the Mexican American
- LIT 41 History of the Humanities
- LIT 42 History of the Humanities
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- LIT 89 History of the Humanities
- LIT 90 History of the Humanities

**Note:** Students may contact the Counseling and Advising Services for the most current information at (909) 594-5611, ext. 4293.
### INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC) 2008-09

#### Area 4: Physical and Biological Sciences

Select three courses, one physical and one biological science, at least one must include a laboratory. Laboratory must be a corresponding section to the lecture course taken. Laboratory courses are underlined.

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<tr>
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<tbody>
<tr>
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<tr>
<td>ANAT 10B</td>
<td>Introductory Human Physiology</td>
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<td>ANAT 35</td>
<td>Human Anatomy</td>
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<td>ANTH 1</td>
<td>Biological Anthropology</td>
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<td>Biological Anthropology Laboratory</td>
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<td>BIOL 1</td>
<td>General Biology</td>
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<td>BIOL 2</td>
<td>Plant and Animal Biology</td>
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<td>BIOL 4</td>
<td>Biology for Majors</td>
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<td>BIOL 4H</td>
<td>Biology for Majors – Honors</td>
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<td>BIOL 6</td>
<td>Humans and the Environment</td>
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<td>BIOL 8</td>
<td>Cell and Molecular Biology</td>
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<td>BIOL 20</td>
<td>Marine Biology</td>
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<td>BIOL 21</td>
<td>Marine Biology Laboratory</td>
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<td>Principles of Microbiology</td>
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<td>MCR 22</td>
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<td>PSYC 1B</td>
<td>Biological Psychology</td>
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</table>

### UC REQUIREMENT ONLY

#### Language other than English:

The minimum proficiency required is met by completing one of the courses listed below or by completion of two years of high school study in the same language.

- CHIN 1 Elementary Chinese
- JAPN 1 Elementary Japanese
- FRCH 1 Elementary French
- SIGN 101 American Sign Language I
- GER 1 Elementary German
- SPAN 1 Elementary Spanish
- ITAL 1 Elementary Italian
- SPAN 11 Spanish for the Spanish Speaking

### CSU GRADUATION REQUIREMENTS ONLY IN U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS:

**Note:** UC Berkeley requires a college-level U.S. history or government course.

**Option 1:** HIST 7 (or 7H) + HIST 8 (or 8H)

**Option 2:** Completion of one course from U.S. History plus one course from American Institutions.

See the categories below under United States History and American Institutions.

#### United States History:

- HIST 1 History of the United States
- HIST 7 History of the United States
- HIST 7H History of the United States – Honors
- HIST 8 History of the United States
- HIST 8H History of the United States – Honors
- HIST 30 History of the African American
- HIST 31 History of the African American
- HIST 36 Women in American History – Beyond the Stereotypes
- HIST 40 History of the Mexican American

#### American Institutions:

- POLI 1 Political Science
- POLI 1H Political Science – Honors
- POLI 25 Politics of the Mexican American
- POLI 35 African American Politics

**Notes:** UC limits transfer credit for some courses. Students may review the UC Transfer Course Agreement (TCA) with an educational advisor or counselor in the Student Services Center. Students must see an educational advisor or counselor for preliminary IGETC certification. For IGETC certification, the course must be on the list during the year taken. Students from non-English speaking countries should see an educational advisor or international student counselor for language proficiency equivalences.
IGETC AFTER TRANSFER
PARTIAL CERTIFICATION OF THE
INTERSEGMENTAL GENERAL EDUCATION
TRANSFER CURRICULUM (IGETC)

The IGETC provides a pattern of courses that fulfill the transfer general education requirements at both the University of California (UC) and the California State University (CSU). Each California community college offers a complete set of courses that satisfies IGETC. If you attend more than one community college, the campus you attend just prior to transfer will certify your completion of IGETC, including courses taken at other colleges. The IGETC pattern is not recommended for all majors. See your counselor/educational advisor for advice and more complete information on the IGETC certification.

CALIFORNIA INDEPENDENT COLLEGES AND UNIVERSITIES

California’s fully-accredited independent colleges and universities provide many options at the undergraduate, graduate, and professional levels for students planning to continue their education beyond the community college.

Admission requirements vary and are listed in the catalogs of the various universities and colleges.

Financial aid may be a primary factor in making it possible for a student to attend an independent college or university. There are many forms of financial assistance available, such as federal, state, institutional, and private aid. Students should apply for scholarships, grants, loans, and work-study awards from all possible sources. All independent colleges urge, and some require, that all undergraduates who are California residents apply for a Cal Grant. Financial aid applications are available in January for the following academic year and may be obtained from a campus financial aid office. Filing instructions and deadlines are indicated on the form. Contact the individual campuses for details and assistance in completing the necessary forms.

The independent colleges and universities include:

- Alliant International University
- American Academy of Dramatic Arts Los Angeles
- Antioch University Los Angeles
- Art Center College of Design
- Azusa Pacific University
- Biola University
- California Baptist University
- California College of the Arts
- California Institute of Technology (Cal Tech)
- California Institute of the Arts
- California Lutheran University
- Chapman University
- Charles R. Drew University of Medicine and Science
- Claremont Graduate University
- Claremont McKenna College
- Cogswell Polytechnical College
- Concordia University
- DeVry Institute of Technology
- Dominican University of California
- Fielding Graduate University
- Fresno Pacific University
- Golden Gate University
- Harvey Mudd College
- Holy Names College
- Hope International University
- Humphreys College
- John F. Kennedy University
- Keck Graduate Institute
- La Sierra University
- Laguna College of Art and Design
- Loma Linda University
- Loyola Marymount University
- Marymount College
- The Master’s College
- Menlo College
- Mills College
- Monterey Institute of International Studies
- Mount St. Mary’s College
- National University
- Notre Dame de Namur University
- Occidental College
- Otis College of Art and Design
- Pacific Graduate School of Psychology
- Pacific Oaks College
- Pacific Union College
- Patten College
- Pepperdine University
- Phillips Graduate Institute
- Pitzer College
- Point Loma Nazarene University
- Pomona College
- Saint Mary’s College of California
- Samuel Merritt College
- San Diego Christian College
- San Francisco Conservatory of Music
- Santa Clara University
- Saybrook Graduate School and Research Center
- Scripps College
- Simpson University
- Soka University of America
- Southern California University of Health Sciences
- Stanford University
- Thomas Aquinas College
- Touro University California
- University of Judaism
- University of La Verne
- University of Redlands
- University of San Diego
- University of San Francisco
- University of Southern California
- University of the Pacific
- Vanguard University of Southern California
- Western University of Health Sciences
- Westmont College
- Whittier College
- William Jessup University
- Woodbury University

For more information on California Independent Colleges and Universities see an educational advisor or counselor in Counseling and Advising Services. You may also obtain information from the aiccu.edu.
Course Descriptions

DEFINITIONS OF TERMS

CSU Transfer
Courses designated “CSU” are baccalaureate level and will transfer to all of the California State Universities and count toward graduation at Mt. San Antonio College.

CSU/UC Cross Enrollment Program
California residents students at Mt. San Antonio College may enroll in one undergraduate course per term at any CSU or UC campus provided the student has met the course prerequisites and approval is granted by both Mt. SAC and the university. To cross-enroll, students must: have completed at least one term at Mt. SAC; have a 2.0 grade point average (GPA) in transferable course work; and be enrolled in at least six units at Mt. SAC. A $10.00 fee plus any material/laboratory fees associated with the course may be charged. To apply for the CSU/UC Cross Enrollment Program, students must complete the CSU/UC Cross Enrollment application; these forms are available in the Advising Center.

UC Transfer/UC Credit Limitation
Courses designated “UC” are baccalaureate level and will transfer to all of the University of California campuses and California State Universities, and will count toward graduation at Mt. San Antonio College. UC limits credit for some courses. Students contemplating transfer to UC should consult with an educational advisor and review the UC Transfer Course Agreement (TCA) for course credit limitations and changes.

UC Credit for Physical Education Activity Courses
A maximum of four semester units of UC credit will be awarded for Physical Education Activity courses. Courses of a vocational nature such as Fire or Police Academy Protection Preparation or Aerobic Instructor Training will not be awarded UC credit.

UC Credit Pending
Credit for Special Projects courses are given only after a review of the topic for the course by the enrolling UC campus. This usually occurs after transfer and may include recommendations from faculty. The UC will not give credit for special projects courses in Journalism, Photography, Health, Business Administration, Architecture, Administration of Justice (Criminology) or Library Departments because of the credit restrictions in those areas.

CAN (California Articulation Number System)
The California Articulation Number (CAN) System is a statewide numbering system of independent twin course numbers assigned by local colleges. A CAN number signals that participating California colleges and universities have determined that courses offered by other campuses are equivalent in content and scope to courses offered on their own campuses, regardless of their unique titles or local identifying numbers. Thus, if a schedule of classes or catalog lists a course bearing a CAN number, students on one campus can be assured that it will be accepted in lieu of the comparable CAN course noted in the catalog or schedule of classes of another campus. For example, CAN ECON 2 on one campus will be accepted as meeting the requirement of the designated CAN ECON 2 course on other participating community college or university campuses.

The CAN numbering system is obviously useful for students attending more than one community college and is applied to many of the transferable, lower division courses students need as preparation for their intended major. Because these course requirements may change, however, and because courses are continually being redefined, qualified, or deleted from the CAN database, students should always check with an educational advisor in The Advising Center or counselor in the Counseling Department to determine how CAN-designated courses fit into their educational plans for transfer. Students should consult the ASSIST database at www.assist.org for specific information on course agreements. The college staff will help students interpret this information.

Eligibility
In listing a prerequisite for enrolling in a course, an “eligibility” may also be listed. An eligibility requirement specifies the course level the student must qualify to enroll in—not that the course has to be completed prior to enrollment. For example, the prerequisite “eligibility for English 68” requires that the student must qualify to enroll in English 68 in order to enroll in the particular course.

Pre-requisite
A prerequisite is a course which must be taken as preparation for enrolling in another course.

Corequisite
A corequisite is a course which is required to be taken simultaneously in order to enroll in another course.

Advisory
An advisory prerequisite is a course which is advised, but not required, to be taken either before or in conjunction with enrollment in a course.

Pre-Collegiate Basic Skills
Courses designated “Pre-collegiate” develop basic skills in reading, writing, and computation. They will neither count toward graduation from Mt. San Antonio College nor transfer to four-year colleges and universities.

Non-Degree Credit
Courses designated “Non-Degree Credit” are college level classes which are neither a part of an associate degree or certificate program nor transferable to four-year colleges and universities.

Degree Appropriate
Courses designated “Degree Appropriate” are college-level classes which are a part of an associate degree or certificate program.

Physical Education Activity
Physical education activity units consist of a combination of lecture and activity hours. This includes all PE classes except those having a prefix of PE.

UC Credit for Physical Education Activity Courses
A maximum of four semester units of UC credit will be awarded for Physical Education activity courses. Courses of a vocational nature such as Fire or Police Academy Protection Preparation or Aerobic Instructor Training will not be awarded UC credit.
## COURSE DESCRIPTIONS

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<th>Course Name</th>
<th>Credits</th>
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<tr>
<td>AERO</td>
<td>Aeronautics</td>
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<td>AGAB</td>
<td>Agriculture: Agri-Business</td>
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<td>AGHE</td>
<td>Agriculture: Animal Health Technology</td>
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<td>AGAN</td>
<td>Agriculture: Animal Science – General</td>
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<td>AGFR</td>
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<td>Agriculture: General Subjects</td>
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<td>AGOR</td>
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<td>Art: Basic Studio Arts</td>
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<td>Art: Gallery &amp; Professional Practices</td>
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<td>CISM</td>
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<td>CISN</td>
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<td>CSP</td>
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<td>Computer Information Systems: Web Applications</td>
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<td>FASH</td>
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<td>INS</td>
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</tbody>
</table>
**Course Descriptions**

**ADMINISTRATION OF JUSTICE: LAW ENFORCEMENT**

**ADJU 1 — The Administration of Justice System**
3 Units
(CAN AJ 2) Degree Appropriate, CSU, UC
54.00 hours lecture.
History and philosophy of the justice system, subsystems, roles, relationships and theories of crime causation and correction.

**ADJU 2 — Principles and Procedures of the Justice System**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Roles and responsibilities of each segment of the justice system; additional focus on relationships between system segments and subsystem procedures from initial incident to final disposition.

**ADJU 3 — Concepts of Criminal Law**
3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Provides an overview of California criminal law from the perspective of the law enforcement officer.

**ADJU 4 — Legal Aspects of Evidence**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Introduction to criminal evidence, including admissibility, witness competency, privileged communication, hearsay, and collection and preservation of evidence.

**ADJU 5 — Community Relations**
3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Community problems and policing. Focus on service image, diversity, human relations, crises and confrontations with the public.

**ADJU 6 — Concepts of Enforcement Services**
3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Responsibilities, techniques and methods of police patrol with emphasis on the basic knowledge required in handling common police occurrences.

**ADJU 13 — Concepts of Traffic Services**
3 Units
54.00 hours lecture. Degree Appropriate.
A study of traffic management, collision reconstruction, collision factors including law violations and human factors, collision evidence, traffic enforcement techniques and specialization in traffic management. Emphasis is placed on service to the motoring public.

**ADJU 20 — Principles of Investigation**
3 Units
Spring Semester Degree Appropriate, CSU
54.00 hours lecture. Degree Appropriate, CSU
Prerequisite: Eligibility for ENGL 68
Fundamentals of investigation; 4th Amendment issues including crime scene search and recording; collection and preservation of physical evidence; modus operandi; scientific aids; sources of information; interviews and interrogation; follow up and case preparation.

**ADJU 38 — Narcotics Investigation**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
54.00 hours lecture. Degree Appropriate
Prerequisite: Eligibility for ENGL 68
Investigation techniques for drug enforcement. Drug effects, use of informants, amendment issues, and handling of evidence.

**ADJU 59 — Gangs in the Community/Corrections**
3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Advisory: Eligibility for ENGL 68, ADJU 1
Exploration of contemporary street and prison gang issues, including historical and current perspectives, prison gang dynamics, identification of characteristics, cultural differences of gang philosophy. Includes law enforcement/corrections role in intervention/suppression.

**ADJU 68 — Administration of Justice Report Writing**
3 Units
54.00 hours lecture. Degree Appropriate
Techniques for proper documentation of crime reports and related law enforcement records. Use of simulations and role-playing.

**ADJU 74 — Vice Control**
3 Units
54.00 hours lecture. Degree Appropriate
Prerequisite: Eligibility for ENGL 68
Code and case law dealing with vice; detection and suppression; apprehension and prosecution of violators; special consideration of laws dealing with gambling, prostitution, and sex crimes.

**AERONAUTICS**

**AERO 23 — Primary Pilot Ground School**
4 Units
72.00 hours lecture. Degree Appropriate, CSU, UC
Basic aerodynamics, aircraft performance, Federal Aviation Regulations, aviation weather factors, and cross-country navigation procedures; provides introductory material on radio navigation, aeronautical charts, and radio communication procedures. Meets the preparation requirements for the FAA Private Pilot computerized knowledge examination.

**AERO 24 — Navigation**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: AERO 23
Advanced dead reckoning navigation procedures. Aeronautical charts and their application in cross-country flying. Use of radio navigation aids, flight planning, flight directors, global positioning system, and electronic flight instrumentation systems.

**AERO 25 — Commercial Pilot Ground School**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: AERO 23
FAA Commercial Pilot certification requirements, including aerodynamics, commercial pilot maneuvers, complex aircraft operations, multi-engine aircraft operations, aircraft weight and balance, aircraft performance charts, and radio navigation using advanced instrumentation. Prepares students for completion of the FAA Commercial Pilot Computerized Knowledge Examination.

**AERO 26 — Aviation Weather**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
A basic study of weather elements, the atmosphere, weather mechanics, weather disturbances, weather analysis and forecasts. Evaluation of aviation weather reports and forecasts.

**AERO 27 — Aviation Safety and Human Factors**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: AERO 23
Evaluates and analysis of factors which lead to aircraft accidents. Includes the study of aircraft accident cause factors, with emphasis on human behavior as it relates to the environment of the pilot and air traffic controller.

**AERO 28 — Aircraft and Engines**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: AERO 23
Aircraft design, subsystems, repair and maintenance. Principles of internal combustion engines, fuel system, engine construction and design, lubrication and cooling methods, ignition system, basic troubleshooting. Turbine engine basic design and operational characteristics.

**AERO 29 — Federal Aviation Regulations**
2 Units
36.00 hours lecture. Degree Appropriate, CSU
Federal Aviation regulations that pertain to pilot certification, aircraft maintenance, general operating rules; air traffic control procedures; reporting of aircraft accidents.

**AERO 30 — Instrument Ground School**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: AERO 23 and AERO 26
Instrument Flight Rules, Air Traffic Control communications and procedures, air navigation radio aids, instrument landing systems, flight instruments, aircraft performance, aeronautical publications, instrument approach procedures, IFR cross-country navigation, and instrument weather. Meets the preparation requirements for the FAA Instrument Pilot computerized knowledge exam.

**AERO 40 — Flight**
1 Unit
18.00 hours lecture. Degree Appropriate
(May be taken for credit/no credit only.)
Advisory: AERO 23 takes prior or concurrently
Flight training career preparation, including evaluation of locally available flight training options and flight career opportunities including corporate aviation, charter operations, cargo airline careers, and military flight training. Students who repeat this course will improve skills through further instruction and practice.
AERO 40L — Flight Laboratory  1 Unit
54.00 hours lab.  Degree Appropriate
(May be taken four times for credit.)
Advisory: AERO 40
Prerequisite: AERO 23 taken prior or concurrently
Primary pilot training and the development of specialized skills.
Students individually schedule training lessons at a flight school of their
choice, under the supervision of an FAA certificated flight instructor.
Students must complete a minimum of 15 hours of flight time,
including three hours of dual instruction. Students who repeat this
course will improve skills through further instruction and practice.

AERO 41 — Basic Flight Simulator Laboratory  .5 Unit
27.00 hours lab.  Degree Appropriate
(May be taken for Credit/No Credit only.)
Advisory: AERO 25
Flight simulator training in the iGATE PC-ATD simulator in preparation
for the instrument rating, full and partial panel airwork, holding
patterns, VOR and ADF orientation, and instrument approach
procedures.

AERO 42 — Advanced Flight Simulator Laboratory  .5 Unit
54.00 hours lab.  Degree Appropriate
(May be taken for Credit/No Credit only.)
Advisory: AERO 30 or AERO 41
Flight simulator training in the ATC-810 simulator in preparation for the
multi-engine rating and advanced instrument flight. Emergency
procedures for multi-engine aircraft and high performance airplanes.

AERO 45A — Multi-Engine Turbine Aircraft Operations  3 Units
54.00 hours lecture.  Non-Degree Credit
Advisory: Private Pilot’s Certificate and AERO 30 or Instrument Rating
An introduction to the design features and operational characteristics of a
selected multi-engine turbine aircraft utilized in regional airline
operations and corporate aviation, with emphasis on aircraft and engine
systems.

AERO 58 — Flight Instructor Ground School  3 Units
54.00 hours lecture.  Non-Degree Credit
Advisory: AERO 23 and AERO 30 or Commercial Pilot Certificate with
Instrument Rating
The learning process, basic teaching principles, and the application of
these principles in teaching student pilots. Analysis of flight maneuvers
and instruments. Prepares students for the FAA computerized
knowledge tests for Flight Instructors.

AGAB 20 — Microcomputer Applications in Agriculture 3 Units
54.00 hours lecture.  Degree Appropriate, CSU, UC
(CAN AG 2)
Advisory: Eligibility for ENGL 68
Use of word processing, data base, spreadsheets, and graphic programs
for students interested in agricultural business, nursery and landscape,
equipment, and farm management.

AGHE 68 — Veterinary Pharmacology  3 Units
54.00 hours lecture.  Degree Appropriate, CSU
Prerequisite: AGLI 95
Introduces students to the expansive field of clinical pathology. Topics
include bacteriology, clinical chemistry, urinalysis, external parasites, and
cytology.

AGHE 79 — Laboratory Animal Medicine and Care  3 Units
54.00 hours lab.  Degree Appropriate
Prerequisite: AGLI 95 and formal admittance to the Registered Veterinary
Technology Program
Animal examination for health and disease conditions in the animal
hospital, including sanitation, administration of medicine, emergency
treatment, therapeutic techniques, dental prophylaxis, venipuncture,
electrocardiography, application of casts, splints and other appliances.
Includes diseases, their causes and effects, and immunology of animals.

AGHE 80 — Medical Nursing and Animal Care  4 Units
54.00 hours lecture.  Degree Appropriate, CSU
Prerequisite: AGLI 95 and formal admittance to the Registered Veterinary
Technology Program
Basic concepts in pharmacological chemistry. Pharmaceuticals and
biologics commonly used in the maintenance of animal health. Includes
generic terminology, abbreviations for prescriptions, labeling
requirements, state and federal laws, classification of materials, weights
and measures, drug dosage flow rates, pharmacological mathematics
and the metric system, side effects and drug interactions.

AGHE 83A — Work Experience in Animal Health 1 Unit
75.00 hours lab.  Degree Appropriate
This course is designed to provide Registered Veterinary Technician
majors with actual on-the-job experience at an approved work station
which is related to classroom instruction. A minimum of 75 paid clock
hours or 60 non-paid clock hours per semester is required for each one
unit of credit. It is recommended that the hours per week are equally
distributed throughout the semester. Students who repeat this course
will improve skills through further instruction and practice.
## Course Descriptions

### AGRICULTURE: ANIMAL SCIENCE-GENERAL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGAN 1</td>
<td>Animal Science</td>
<td>3</td>
<td>Fundamental problems and essential concepts of animal production. Includes the study of the types of domestic animals and their utilization by humans.</td>
</tr>
<tr>
<td>AGAN 2</td>
<td>Animal Nutrition</td>
<td>3</td>
<td>Composition of feeds and their utilization by domestic animals, including digestive physiology, animal assessment, feed appraisal and compiling of rations.</td>
</tr>
<tr>
<td>AGAN 94</td>
<td>Animal Breeding</td>
<td>3</td>
<td>The science of animal breeding, including fundamentals of inheritance, reproduction and breeding systems for domestic animals. Artificial insemination, embryo manipulation and current topics in reproductive biotechnology will also be included.</td>
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</table>

### AGRICULTURE: FORESTRY, CONSERVATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AGFR 20</td>
<td>Conservation of Natural Resources</td>
<td>3</td>
<td>Concepts of conservation biology for natural resources, including biogeography, biodiversity and extinction, environmental law, and chemical and physical techniques of restraint.</td>
</tr>
</tbody>
</table>

### AGRICULTURE: GENERAL SUBJECTS

Cluster repeatability: Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values. Cluster: AGAG 59, AGAG 60, AGAG 61, AGAG 62

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AGAG 59</td>
<td>Work Experience in Agriculture</td>
<td>1</td>
<td>This course is designed to provide Animal Science majors with actual on-the-job experience in an approved work station which is related to classroom instruction. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AGAG 60</td>
<td>Work Experience in Agriculture</td>
<td>2</td>
<td>This course is designed to provide Animal Science majors with actual on-the-job experience in an approved work station which is related to classroom instruction. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AGAG 61</td>
<td>Work Experience in Agriculture</td>
<td>3</td>
<td>This course is designed to provide Animal Science majors with actual on-the-job experience in an approved work station which is related to classroom instruction. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
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### AGRICULTURE: LIVESTOCK PRODUCTION

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<tr>
<td>AGLI 16</td>
<td>Horse Production</td>
<td>4</td>
<td>Degree Appropriate, CSU, UC</td>
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<tr>
<td></td>
<td>Fall Semester</td>
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<td>(CAN AG 26)</td>
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<tr>
<td></td>
<td>54.00 hours lecture</td>
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<td>AGLI 17</td>
<td>Sheep Production</td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
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<td></td>
<td>Spring Semester</td>
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<td>(CAN AG 22)</td>
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<td></td>
<td>36.00 hours lecture</td>
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<td>AGLI 18</td>
<td>Horse Ranch Management</td>
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<td>AGLI 19</td>
<td>Horse Hoof Care</td>
<td>2</td>
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<td>AGLI 20</td>
<td>Horse Behavior and Training</td>
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<td>18.00 hours lecture</td>
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<td>AGLI 21</td>
<td>Beef Production</td>
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<td>Degree Appropriate, CSU</td>
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<td></td>
<td>36.00 hours lab</td>
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<td>AGLI 22</td>
<td>Livestock Judging and Selection</td>
<td>2</td>
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<td>AGLI 23</td>
<td>Anatomy of Domestic Animals</td>
<td>4</td>
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<td>54.00 hours lecture</td>
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### AGRICULTURE: ORNAMENTAL HORTICULTURE

Cluster repeatability: Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.

Cluster: AGOR 91, AGOR 92, AGOR 93, AGOR 94

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 92</td>
<td>Horticultural Science</td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>36.00 hours lecture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type of Study</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 2</td>
<td>Plant Propagation/Greenhouse Management</td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
<td>36.00 lecture, 54.00 lab.</td>
</tr>
<tr>
<td>AGOR 3</td>
<td>Park Facilities</td>
<td>3</td>
<td>Degree Appropriate</td>
<td>54.00 lecture</td>
</tr>
<tr>
<td>AGOR 4</td>
<td>Park Management</td>
<td>3</td>
<td>Degree Appropriate</td>
<td>54.00 lecture</td>
</tr>
<tr>
<td>AGOR 5</td>
<td>Interior Landscaping</td>
<td>3</td>
<td>Degree Appropriate</td>
<td>54.00 lecture</td>
</tr>
<tr>
<td>AGOR 6</td>
<td>Landscape Design</td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
<td>36.00 lecture, 54.00 lab.</td>
</tr>
<tr>
<td>AGOR 7</td>
<td>Turf Grass Production and Management</td>
<td>3</td>
<td>Degree Appropriate</td>
<td>36.00 lecture, 54.00 lab.</td>
</tr>
<tr>
<td>AGOR 8</td>
<td>Ornamental Plants - Trees and Woody Shrubs</td>
<td>3</td>
<td>Degree Appropriate</td>
<td>36.00 lecture, 54.00 lab.</td>
</tr>
<tr>
<td>AGOR 9</td>
<td>Ornamental Plants - Herbaceous</td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
<td>36.00 lecture, 54.00 lab.</td>
</tr>
</tbody>
</table>

### Course Descriptions

- **AGOR 2 — Plant Propagation/Greenhouse Management (3 Units)**
  - 36.00 hours lecture.
  - 54.00 hours lab.
  - Plant propagation and production practices with emphasis on florists' plants, woody ornamentals and fruits. Commercial techniques include seed propagation, cuttings, grafting and budding, layering, fern sporling and division. Stress greenhouses and other environmental structures for plant propagation and production.

- **AGOR 3 — Park Facilities (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - Management and operation of different types of park facilities. Includes the management of sports fields, recreation centers, campgrounds, aquatic facilities and golf courses.

- **AGOR 4 — Park Management (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - Management and operation of municipal park departments. Includes the development of budgets, purchasing, park policies, planning and scheduling. Field trip required.

- **AGOR 5 — Interior Landscaping (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - Fundamentals and implementation of landscape design. Principles of design, the design process, drafting, graphics, site evaluation, landscaping materials, and plant usage. Projects emphasize residential and small commercial sites.

- **AGOR 6 — Landscape Design (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 7 — Turf Grass Production and Management (3 Units)**
  - Fall Semester
  - 36.00 hours lecture.
  - 54.00 hours lab.
  - Introduction to cultivation, maintenance, and management of turfgrasses utilized for athletic fields, golf courses, parks, cemeteries, and commercial and residential lawns. Identification, installation, cultural requirements, and maintenance practices are emphasized. Field trips required.

- **AGOR 8 — Ornamental Plants - Trees and Woody Shrubs (3 Units)**
  - 36.00 hours lecture.
  - 54.00 hours lab.
  - Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

- **AGOR 9 — Ornamental Plants - Herbaceous (3 Units)**
  - 36.00 hours lecture.
  - 54.00 hours lab.
  - Identification, growth habits, culture and ornamental use of landscape annuals, biennials, perennials, ferns, indoor plants, groundcovers and vines adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

- **AGOR 10 — Ornamental Plants - Trees and Woody Shrubs (3 Units)**
  - 36.00 hours lecture.
  - 54.00 hours lab.
  - Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

- **AGOR 11 — Ornamental Plants - Herbaceous (3 Units)**
  - 36.00 hours lecture.
  - 54.00 hours lab.
  - Identification, growth habits, culture and ornamental use of landscape annuals, biennials, perennials, ferns, indoor plants, groundcovers and vines adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

- **AGOR 12 — Landscaping and Nursery Management (3 Units)**
  - Fall Semester
  - 36.00 hours lecture.
  - 54.00 hours lab.
  - Operation and management of wholesale and retail nurseries. Includes site location and layout of areas; greenhouse management; soil mixes and proper use of fertilizers, insecticides, fungicides, herbicides and growth regulators; irrigation; mechanization; financing; personnel management; retail displays, advertising and customer relationships; federal, state and local laws and regulations. Field trips are required.

- **AGOR 13 — Interior Landscaping (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 14 — Landscape Design (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 15 — Interior Landscaping (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 16 — Landscape Design (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 17 — Interior Landscaping (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 18 — Landscape Design (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 19 — Interior Landscaping (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 20 — Landscape Design (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 21 — Interior Landscaping (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 22 — Landscape Design (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.

- **AGOR 23 — Interior Landscaping (3 Units)**
  - 54.00 hours lecture.
  - Degree Appropriate
  - (May be taken for option of letter grade or Credit/No Credit.)
  - Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use. Field trip required.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 56</td>
<td>Engine Diagnostics</td>
<td>3</td>
<td>Degree Appropriate, CSU (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. 54.00 hours lab. Analysis and evaluation of tractor power failure. Students gain actual experience in the proper diagnostic procedures of power equipment. Service, maintenance and repair of tractor electrical systems: electrical wiring, voltage regulators, generators, alternators, switches, gauges, batteries and test equipment.</td>
</tr>
<tr>
<td>AGOR 57</td>
<td>Power Train Repair</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. 54.00 hours lab. Service, maintenance, and repair of power trains. Students gain experience with clutches, transmissions, differentials, power take-off units, and final drive used to transmit power on tractors.</td>
</tr>
<tr>
<td>AGOR 62</td>
<td>Landscape Irrigation - Design and Installation</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. 54.00 hours lab. Design and application of turf and ornamental irrigation systems. Design techniques, sprinkler system components and hydraulic principles used in nursery management, interior design, residential and commercial landscaping. Special emphasis is given to water conservation incorporating controlled flow technologies.</td>
</tr>
<tr>
<td>AGOR 63</td>
<td>Landscape Irrigation Systems Management</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. 54.00 hours lab. Advisory: Eligibility for ENGL 66 A systematic approach to water conservation in the landscape. Repair techniques that will allow a current system to efficiently operate to its initial design. Trouble shooting procedures including field testing of valves and controllers. Irrigation efficiency test will be incorporated to demonstrate proper methods of water audits.</td>
</tr>
<tr>
<td>AGOR 64</td>
<td>Landscape Irrigation - Drip and Low Volume</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. 54.00 hours lab. Conservation of water in the landscape by utilization of drip and low-flow irrigation practices. Design, operation and maintenance of drip and low-flow irrigation systems, including determination of irrigation requirements, selection of emitters and low-flow devices, and uniformity of water distribution. Students will gain hands-on experience in design and installation techniques.</td>
</tr>
<tr>
<td>AGOR 71</td>
<td>Landscape Construction Fundamentals</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. 54.00 hours lab. Advisory: Eligibility for ENGL 68 Fundamentals of construction techniques and tools used in landscaping. Students will gain skills in construction projects that include surveying techniques, utilities (gas, water, electricity), woodworking, and masonry.</td>
</tr>
<tr>
<td>AGOR 72</td>
<td>Landscape Hardscape Applications</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. 54.00 hours lab. Landscape construction pertaining to hardscape featured in the landscape. Estimation and installation of fences, walls, planters, patios, lighting, barbecues, gazebos, decks, ponds, spas, fountains and pools. Students will gain hands-on experience in the laboratory activities.</td>
</tr>
<tr>
<td>AGOR 73</td>
<td>Landscaping Laws, Contracting, and Estimating</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours lecture. Landscape laws, contracting, and estimating as it pertains to Landscape Construction. Information covered will be helpful for the licensing exam administered by the state of California C-27 classification. Students will gain hands-on experience of contracting and running a business.</td>
</tr>
<tr>
<td>AGOR 75</td>
<td>Urban Arboriculture</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. 54.00 hours lab. Care and management of ornamental trees. Includes pruning techniques, fruit tree care, bracing, cabling, and pest control. Safe practices in the use of equipment including the use of ropes, chippers, boom trucks, chain saws, and identification and evaluation of common trees. Prepares students for the tree worker and arborist certification exams.</td>
</tr>
<tr>
<td>AGOR 91</td>
<td>Work Experience in Nursery Operations</td>
<td>1</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours lab. This course is designed to provide majors with actual on-the-job experience at an approved work site using skills and knowledge from classroom instruction. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. This course is available to students achieving advanced standing (minimum 12 units in major or equivalent experience.) Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AGOR 92</td>
<td>Work Experience in Nursery Operations</td>
<td>2</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 150.00 hours lab. This course is designed to provide majors with actual on-the-job experience at an approved work site using skills and knowledge from classroom instruction. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. This course is available to students achieving advanced standing (minimum 12 units in major or equivalent experience.) Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AGOR 93</td>
<td>Work Experience in Nursery Operations</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 225.00 hours lab. This course is designed to provide majors with actual on-the-job experience at an approved work site using skills and knowledge from classroom instruction. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. This course is available to students achieving advanced standing (minimum 12 units in major or equivalent experience.) Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
### Course Descriptions

**AGOR 94 — Work Experience in Nursery Operations**  
4 Units  
30.00 hours lab. Degree Appropriate  
(May be taken four times for credit.)  
(May be taken for Credit/No Credit only.)  
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog.  
Provides on-the-job experience in horticulture fields at an approved work site using skills and knowledge from classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. This course is available to students achieving advanced standing (minimum 12 units in major or equivalent experience.) Students who repeat this course will improve skills through further instruction and practice.

**AGPE 70 — Pet Shop Management**  
3 Units  
Fall Semester Degree Appropriate  
54.00 hours lecture.  
The pet industry, pet shop operations and the economic aspects of the retail/wholesale pet business. Includes organization and operation of pet shops, animal care practices, and sound business management practices.

**AGPE 71 — Canine Management**  
3 Units  
36.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Selection, feeding, housing, breeding and management of dogs, including commercial aspects of the dog as a domestic pet. Laboratory work will include practical experience in the handling and training of dogs. May include field trips.

**AGPE 72 — Feline Management**  
3 Units  
54.00 hours lecture. Degree Appropriate  
Advisory: Eligibility for ENGL 68  
Care and management of cats. Includes breed identification and characteristics, grooming, showing, nutrition, practical care, behavior, breeding, and housing.

**AGPE 73 — Tropical and Coldwater Fish Management**  
2 Units  
Fall Semester Degree Appropriate  
36.00 hours lecture.  
Advisory: Eligibility for ENGL 68  
Care and keeping of marine and freshwater aquarium fishes, plants, and invertebrates. Includes guidance on setting up aquariums, choosing compatible species, feeding, health care, breeding and raising fish.

**AGPE 74 — Reptile Management**  
2 Units  
Fall Semester Degree Appropriate  
36.00 hours lecture.  
Advisory: Eligibility for ENGL 68  
Care and keeping of reptiles and amphibians, including snakes, lizards, turtles, tortoises, newts, salamanders and frogs. Includes identification and characteristics of reptiles commonly kept as pets. Guidance regarding the housing, feeding, health maintenance, breeding and raising of reptiles will be offered.

**AGPE 75 — Aviculture — Cage and Aviary Birds**  
3 Units  
Spring Semester Degree Appropriate  
54.00 hours lecture.  
Presents cage and aviary birds marketed in the wholesale and retail pet trade, including identification, nutrition, breeding, disease prevention and control, aviary construction and providing the proper environment. Includes information on psittacines, soft bills, finches, game birds, poultry and ornamental waterfowl.

**AGPE 76 — Aviculture - Cage and Aviary Birds**  
3 Units  
Spring Semester Degree Appropriate  
54.00 hours lecture.  
Presents cage and aviary birds marketed in the wholesale and retail pet trade, including identification, nutrition, breeding, disease prevention and control, aviary construction and providing the proper environment. Includes information on psittacines, soft bills, finches, game birds, poultry and ornamental waterfowl.

**AGPE 77 — Tropical and Coldwater Fish Management**  
2 Units  
Fall Semester Degree Appropriate  
36.00 hours lecture.  
Advisory: Eligibility for ENGL 68  
Care and keeping of marine and freshwater aquarium fishes, plants, and invertebrates. Includes guidance on setting up aquariums, choosing compatible species, feeding, health care, breeding and raising fish.

**AIRC 10 — Technical Mathematics**  
2 Units  
In Air Conditioning and Refrigeration  
27.00 hours lecture. Degree Appropriate  
27.00 hours lab.  
Develops mathematical skills required for the study and application of air conditioning and refrigeration including measurements and equations applied to heat loads, air distribution, electricity, and the design of air conditioning and refrigeration equipment.

**AIRC 11 — Welding for Air Conditioning and Refrigeration**  
2 Units  
18.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Fundamentals of welding related to the field of air conditioning and refrigeration with emphasis on the sterile techniques and skills required for joining copper refrigerant lines and the procedures for light fabrication.

**AIRC 12 — Air Conditioning Codes and Standards**  
3 Units  
54.00 hours lecture. Degree Appropriate  
Building codes and standards as they apply to the air conditioning and refrigeration industry. Develops skills necessary to read and interpret building codes and resolve installation and service problems as they apply to the construction industry.

**AIRC 20 — Refrigeration Fundamentals**  
3 Units  
36.00 hours lecture. Degree Appropriate  
72.00 hours lab.  
Principles of mechanical refrigeration based on the refrigeration cycle and associated mechanical components. Develops skills for interpreting service gauge pressures and sensible temperatures, system dehydration techniques, and the safe handling and containment of refrigerants.

**AIRC 25 — Electrical Fundamentals**  
4 Units  
54.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Electrical principles and practices used in air conditioning and refrigeration as applied to the development and interpretation of schematics and the sequential approach to wiring circuits including power supplies, motors, and controls. Develops skills for designing electrical circuits, and electrical trouble shooting.

**AIRC 26A — Heat Pump Fundamentals**  
1.5 Units  
27.00 hours lecture. Degree Appropriate  
Advisory: AIRC 25 taken prior  
Theory, operation and application of heat pump systems used in residential and light commercial heating installations including the heat pump refrigeration cycle, reversing valves, defrost methods, supplemental heat, balance point, air flow, and heat pump thermostats.

**AIRC 26B — Gas Heating Fundamentals**  
2 Units  
36.00 hours lecture. Degree Appropriate  
Advisory: AIRC 12, AIRC 25 taken prior  
Theory, operation, and application of natural gas and propane heating systems used in residential and light commercial heating installations including the properties of fuel gases, gas combustion, furnace construction, pilot proving devices and ignition systems.

**AIRC 30 — Heat Load Calculations**  
3 Units  
54.00 hours lecture. Degree Appropriate  
Advisory: AIRC 20 taken prior  
Heat load factors and charts will be explored, developed and applied to the heat loss and gain of a residential, refrigeration and commercial building.

**AIRC 31 — Commercial Electrical**  
4 Units  
54.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Advisory: AIRC 25 taken prior  
Electrical control of commercial air conditioning and refrigeration equipment emphasizing time clocks, defrost, three phase transformers, three phase motors, timers, sequencers, starting methods and troubleshooting of three phase systems.
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRC 32A</td>
<td>Air Properties and Measurement</td>
<td>1.5</td>
<td>Investigates the air-side operating theory and application of comfort cooling systems. This course will broaden the student's understanding of air conditioning systems by addressing psychrometrics to include the measurement of dry bulb and wet bulb temperatures, relative humidity, dew point temperatures, and sensible and latent heat processes.</td>
</tr>
<tr>
<td>AIRC 32B</td>
<td>Air Distribution Systems</td>
<td>1.5</td>
<td>Designed as a continuation of AIRC 32A and explores airside equipment and duct design applied to built-up and unitary air distribution systems.</td>
</tr>
<tr>
<td>AIRC 34</td>
<td>Advanced Mechanical Refrigeration</td>
<td>4</td>
<td>Advanced principles of mechanical air conditioning and refrigeration based on operating characteristics of working equipment and the interpretation of the pressure-enthalpy chart. Advanced technical aspects of mechanical components will be explored to include compressors, metering devices, pressure regulators, capacity controls, and defrost methods.</td>
</tr>
<tr>
<td>AIRC 37</td>
<td>Pneumatic Controls</td>
<td>2</td>
<td>Pneumatic controls including thermostats, valves, receiver controllers and dampers applied to various commercial air conditioning and refrigeration systems.</td>
</tr>
<tr>
<td>AIRC 39</td>
<td>Building Automation Systems</td>
<td>4</td>
<td>Principles of building automation systems applied to air conditioning systems, chiller plant operation, and air distribution. Includes the application of variable air volume, constant air systems, multizone systems and controlled devices used in automated air conditioning systems. Emphasis on programming strategies applied to mechanical trainers.</td>
</tr>
<tr>
<td>AIRC 95</td>
<td>Work Experience in Air Conditioning and Refrigeration</td>
<td>1</td>
<td>This course is designed to combine actual job experience in Air Conditioning &amp; Refrigeration with related classroom instruction. This work experience may be during a regular semester or during a summer session. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRC 96</td>
<td>Work Experience in Air Conditioning and Refrigeration</td>
<td>2</td>
<td>This course is designed to combine actual job experience in Air Conditioning &amp; Refrigeration with related classroom instruction. This work experience may be during a regular semester or during a summer session. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRC 97</td>
<td>Work Experience in Air Conditioning and Refrigeration</td>
<td>3</td>
<td>This course is designed to combine actual job experience in Air Conditioning &amp; Refrigeration with related classroom instruction. This work experience may be during a regular semester or during a summer session. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRC 98</td>
<td>Work Experience in Air Conditioning and Refrigeration</td>
<td>4</td>
<td>This course is designed to combine actual job experience in Air Conditioning &amp; Refrigeration with related classroom instruction. This work experience may be during a regular semester or during a summer session. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRT 41</td>
<td>Aircraft Recognition and Performance</td>
<td>3</td>
<td>Aircraft operation in the National Airspace System. Control tower operations, terminal and enroute radar control. Coordination and control within an ATC team environment. Radio communication techniques and phraseology. Non-radar control and separation procedures.</td>
</tr>
<tr>
<td>AIRT 43</td>
<td>Air Traffic Control Team Skills</td>
<td>1.5</td>
<td>Leadership skills for aviation professionals, with emphasis on air traffic control scenarios. Control tower simulations, including communication and conflict resolution. Coordination and control of air traffic utilizing FAA standards and interpersonal team skills.</td>
</tr>
<tr>
<td>AIRT 45</td>
<td>Flight Services</td>
<td>3</td>
<td>Air traffic control procedures utilized by Flight Service Stations in providing flight assistance and communication services. Air traffic pilot briefings, emergency procedures, flight handling, search and rescue, and introduction to data transmission procedures and services.</td>
</tr>
</tbody>
</table>
## COURSE DESCRIPTIONS

### AIRCRAFT MAINTENANCE TECHNOLOGY

#### Cluster repeatability:
Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.

Clustering:
- **AIRM 80, AIRM 81**

#### AIRM 65A — Aircraft Powerplant Maintenance Technology 12 Units
**Fall Semester**  
Degree Appropriate

- 36.00 hours lecture.
- 72.00 hours lab.

Advisory: AIRM 70A, AIRM 71

Theory and maintenance of aircraft powerplant including systems and components. Approved by the FAA and required for the Airframe & Aircraft Powerplant Maintenance Technology Major.

#### AIRM 65B — Aircraft Powerplant Maintenance Technology 12 Units
**Spring Semester**  
Degree Appropriate

- 108.00 hours lecture.
- 324.00 hours lab.

Advisory: AIRM 70B, AIRM 72, AIRM 73

Continuation of Aircraft Powerplant Maintenance Technology 65A, focusing on reciprocating engine systems and components and turbine engine systems and components. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.

#### AIRM 66A — Airframe Maintenance Technology 12 Units
**Fall Semester**  
Degree Appropriate, CSU

- 108.00 hours lecture.
- 324.00 hours lab.

Advisory: AIRM 70A, AIRM 71

Continuation of Aircraft Powerplant Maintenance Technology 66A, focusing on airframe systems and components. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.

#### AIRM 66B — Airframe Maintenance Technology 12 Units
**Spring Semester**  
Degree Appropriate

- 108.00 hours lecture.
- 324.00 hours lab.

Advisory: AIRM 70B, AIRM 72, AIRM 73

Continuation of Airframe Maintenance Technology 66A, focusing on airframe systems and components. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.

#### AIRM 70A — Aircraft Maintenance Electricity and Electronics 3 Units
**Fall Semester**  
Degree Appropriate

- 36.00 hours lecture.
- 72.00 hours lab.

Advisory: AIRM 71

Basic electrical theory including units, terminology, applications of Ohm’s Law in series and parallel circuits, nickel cadmium and lead acid storage batteries, generators and related control circuits, electrical wiring practical measuring instruments construction and use. Approved by the FAA and required for the Airframe & Aircraft Powerplant Maintenance Technology Major.

#### AIRM 70B — Aircraft Maintenance Electricity and Electronics 3 Units
**Spring Semester**  
Degree Appropriate

- 36.00 hours lecture.
- 72.00 hours lab.

Advisory: AIRM 72, AIRM 73 (May be taken concurrently)

Basic principles of alternating current, terminology, units and circuit arrangements, alternators, inverter and related controls, deactivating of switches and circuit breakers, capacitors, inductors, transistors, cathode ray tube electronics, microprocessors, computers, power distribution systems for large aircraft. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology Major.

#### AIRM 71 — Aviation Maintenance Science 6 Units
**Fall Semester**  
Degree Appropriate

- 108.00 hours lecture.
- 324.00 hours lab.

Advisory: AIRM 70B, AIRM 72, AIRM 73

Continuation of Aviation Maintenance Science 65A, requiring proficiency in theory of flight, inspection, maintenance, repair, and alteration of aircraft structures. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.

#### AIRM 72 — Aviation Materials and Processes 1.5 Units
**Fall Semester**  
Degree Appropriate

- 72.00 hours lab.

Advisory: AIRM 65A/B, or AIRM 66A/B, or AIRM 90-93 A/B, or equivalent

An FAA approved course covering aviation materials, non-destructive testing, basic heat-treating and an introduction to machine tool operation.

#### AIRM 73 — Aviation Welding 1.5 Units
**Fall Semester**  
Degree Appropriate

- 72.00 hours lab.

Advisory: AIRM 65A/B, AIRM 66A/B (May be taken concurrently)

Theory and techniques of gas and inert gas welding as they apply to aircraft construction and repair. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.

#### AIRM 74 — Aircraft Maintenance Technology - Work Experience 2 Units
**Fall Semester**  
Degree Appropriate

- 72.00 hours lab.

Advisory: AIRM 65A/B, or AIRM 66A/B, or AIRM 90-93 A/B, or equivalent

Additional lab instruction for students lacking FAA required hours to complete a training certificate or requiring remediation of program modules or completion of laboratory assignments. 108 lab hours maximum available. Students who repeat this course will improve skills through further instruction and practice.

#### AIRM 80 — Lab Studies in Aircraft Maintenance Technology .5 Unit
**Fall Semester**  
Degree Appropriate

- 27.00 hours lab.

Advisory: AIRM 65A/B, or AIRM 66A/B, or AIRM 90-93 A/B, or equivalent

Additional lab instruction for students needing FAA required hours to complete a training certificate or requiring remediation of program modules or completion of laboratory assignments. 108 lab hours maximum available. Students who repeat this course will improve skills through further instruction and practice.

#### AIRM 81 — Lab Studies in Aircraft Maintenance Technology 1 Unit
**Fall Semester**  
Non-Degree Credit

- 54.00 hours lab.

Advisory: AIRM 65A/B, or AIRM 66A/B, or AIRM 90-93 A/B, or equivalent

Additional lab instruction for students lacking FAA required hours to complete a training certificate or required remediation of program modules or completion of laboratory assignments. Students who repeat this course will improve skills through further instruction and practice.
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
<th>Duration</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRM 90A — Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>FAA approved course covering aircraft flight, flight control and construction methods and procedures.</td>
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<tr>
<td>AIRM 90B — Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Aircraft structural designs, station numbers, aviation nomenclature and definitions. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.</td>
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<tr>
<td>AIRM 91A — Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Aircraft wood structures, their coverings and finishes. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.</td>
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<tr>
<td>AIRM 91B — Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Metals and composite materials used in aircraft construction, maintenance, and repair. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.</td>
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<tr>
<td>AIRM 92A — Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>Spring Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Spring Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Aircraft hydraulic and pneumatic power systems, landing gear and engine starting systems and electrical power generating devices.</td>
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<tr>
<td>AIRM 92B — Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>Spring Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Spring Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Aircraft warning systems, aircraft instrument systems and aircraft fuel storage and transfer systems. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology Major.</td>
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</tr>
<tr>
<td>AIRM 93A — Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>FAA approved course covering aircraft cabin heating and cooling, communication and navigation systems, and ice and rain control systems in small and large aircraft.</td>
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<tr>
<td>AIRM 93B — Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Aircraft fire detection and suppression systems. Aircraft inspection requirements and procedures. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.</td>
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<tr>
<td>AIRM 95A — Aircraft Powerplant Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Aircraft engine theory, nomenclature, application, constant speed devices, and propeller controls. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology Major. Required for FAA certification.</td>
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<tr>
<td>AIRM 95B — Aircraft Powerplant Maintenance Technology</td>
<td>3 Units</td>
<td>Spring Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<td>Spring Semester</td>
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<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Aircraft engine theory, nomenclature, application, constant speed devices, and propeller controls. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology Major. Required for FAA certification.</td>
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<tr>
<td>AIRM 97A — Aircraft Powerplant Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>FAA approved course covering instrumentation and smoke and fire detection/suppression systems used in small and large aircraft. Includes engine starting systems and electrical power generating devices.</td>
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<tr>
<td>AIRM 97B — Aircraft Powerplant Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Reciprocating and turbine engine ignition system theory and operation. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.</td>
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<tr>
<td>AIRM 98A — Aircraft Powerplant Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Reciprocating and turbine engine lubricants and lubricating systems. Includes familiarization with terms.</td>
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<tr>
<td>AIRM 98B — Aircraft Powerplant Maintenance Technology</td>
<td>3 Units</td>
<td>Fall Semester</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>36.00 hours lecture.</td>
<td>72.00 hours lab.</td>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73</td>
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<tr>
<td>Reciprocating and turbine engine lubricants and lubricating systems. Includes familiarization with terms.</td>
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</tbody>
</table>

### Course Descriptions

**AD 1 — Alcohol/Drug Dependency**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Presents an overview of alcohol and chemical dependencies and ramifications. Explores the impact these dependencies have upon the individual's social, psychological, economic, physiological well-being, community and family concerns. Examines the “myths,” images, and stereotypes about substances and substance abusers. Includes familiarization with terms.

**AD 2 — Physiological Effects of Alcohol/Drugs**
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Examines in-depth the physiological effect of alcohol and other drugs on the human body. Includes aspects of tolerance, habituation, cross tolerance and synergistic effect.
Course Descriptions

AD 3 — Chemical Dependency: Intervention, Treatment and Recovery 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Examines and analyzes the tools and techniques necessary in moving the chemically dependent individual into the treatment process; the varying types of treatment programs, and the essentials of effective recovery.

AD 4 — Issues in Domestic Violence 3 Units
54.00 hours lecture. Degree Appropriate
Examines the history, law and psychology of domestic violence; cultural/social aspects; relationship to substance abuse.

AD 5 — Chemical Dependency: Prevention and Education 1.5 Units
27.00 hours lecture. Degree Appropriate, CSU
Reviews and examines drug prevention effectiveness, at both the private and public level. Appraises personal attitudes, past and present, and their influence on societal norms. Evaluates current prevention programs and the necessary steps for developing, funding and managing a program.

AD 6 — Dual Diagnosis 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Overview of the complex interactions of mental disorders and chemical dependency. Reviews and examines the key areas involving dual diagnosis: definition, diagnosis, treatment and aftercare.

AD 8 — Group Process and Leadership 3 Units
54.00 hours lecture. Degree Appropriate
Advisory: AD 1, AD 2, AD 3 taken prior and AD 4, AD 5, AD 6 taken prior or concurrently
Introduces the theory and practice of group counseling, the group process and dynamics of group interaction.

AD 9 — Family Counseling 3 Units
54.00 hours lecture. Degree Appropriate
Advisory: AD 1, AD 2, AD 3 taken prior and AD 4, AD 5, AD 6 taken prior or concurrently
Introduces the theory and practice of family counseling. Topics include, family systems and dynamics, effects of chemical dependency, and counseling techniques.

AD 10 — Client Record and Documentation 1.5 Units
Spring Semester Degree Appropriate
27.00 hours lecture. Advisory: AD 1, AD 2, AD 3 taken prior and AD 4, AD 5, AD 6 taken prior or concurrently
Identify documentation methods required by government regulatory bodies in clinical records. Emphasis on biopsychosocial history.

AD 11 — Techniques of Intervention and Referral 3 Units
54.00 hours lecture. Degree Appropriate
Advisory: AD 1, AD 2, AD 3 taken prior and AD 4, AD 5, AD 6 taken prior or concurrently
Study and practice techniques used for crisis and beginning counseling intake interviewing and referral. Using an experiential format, participants will learn and practice skills in attentive listening, recognizing and responding to different levels of client communication.

AD 13 — Internship/Seminar 3.5 Units
(May be taken for Credit/No Credit only.) Degree Appropriate, CSU
27.00 hours lecture.
126.00 hours lab.
Advisory: AD 10 and AD 13
Second semester course focusing on the application of values, concepts and skills learned to actual process of helping chemically dependent persons.

AD 14 — Advanced Internship/Seminar 3.5 Units
(May be taken for Credit/No Credit only.) Degree Appropriate, CSU
27.00 hours lecture.
126.00 hours lab.
Advisory: AD 10 and AD 13
Intermediate course in the study of idiomatic language, including common American idioms and proverbs, as used in everyday language situations.

AD 11 — Techniques of Intervention and Referral 3 Units
54.00 hours lecture. Degree Appropriate
Advisory: AD 1, AD 2, AD 3 taken prior and AD 4, AD 5, AD 6 taken prior or concurrently
Study and practice techniques used for crisis and beginning counseling intake interviewing and referral. Using an experiential format, participants will learn and practice skills in attentive listening, recognizing and responding to different levels of client communication.

AMERICAN LANGUAGE

AMLA 215 — Accent Reduction 2 Units
(May be taken two times for credit.) Pre-Collegiate
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
Advisory: Eligibility for AMLA 41W
Enhances the ability of non-native speakers to listen effectively and speak formally in a variety of situations. Emphasis is on note-taking, outlining, organizing speeches, and verbal articulation of ideas.

AMLA 235 — American Language Formal Speaking 2 Units
(May be taken two times for credit.) Pre-Collegiate
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
Advisory: Eligibility for AMLA 41W
Enhances the ability of non-native speakers to listen effectively and speak formally in a variety of situations. Emphasis is on note-taking, outlining, organizing speeches, and verbal articulation of ideas.

AMLA 24 — Idiomatic English 2 Units
(May be taken two times for credit.) Pre-Collegiate
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
Intermediate course in the study of idiomatic language, including common American idioms and proverbs, as used in everyday language situations.

AMLA 31R — American Language Basic Reading 4 Units
(May be taken two times for credit.) Pre-Collegiate
72.00 hours lecture.
Prerequisite: Satisfactory score on appropriate Reading Placement Test or successful completion of noncredit ESL Level 4
Basic reading and vocabulary for non-native speakers. Students who repeat this course will improve skills through further instruction and practice.

AMLA 32R — American Language Intermediate Reading 4 Units
(May be taken two times for credit.) Pre-Collegiate
72.00 hours lecture.
Prerequisite: Successful completion of AMLA 31R, or satisfactory score on appropriate Reading Placement Test, or successful completion of noncredit ESL Levels 5, 6, or VESL
Intermediate reading and vocabulary for non-native speakers. Students who repeat this course will improve skills through further instruction and practice.

AMLA 33R — American Language Advanced Reading 4 Units
(May be taken two times for credit.) Pre-Collegiate
72.00 hours lecture.
Prerequisite: Successful completion of AMLA 32R or satisfactory score on appropriate Reading Placement Test
Advanced reading and vocabulary for non-native speakers. Students who repeat this course will improve skills through further instruction and practice.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Hours</th>
<th>Degree Appropriate, CSU, UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMLA 41W</td>
<td>American Language Basic Writing</td>
<td>4 units</td>
<td>(May be taken two times for credit.) Pre-Collegiate</td>
<td>72.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AMLA 42W</td>
<td>American Language Intermediate Writing</td>
<td>4 units</td>
<td>(May be taken two times for credit.) Pre-Collegiate</td>
<td>72.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AMLA 43W</td>
<td>American Language Advanced Writing</td>
<td>4 units</td>
<td>(May be taken two times for credit.) Pre-Collegiate</td>
<td>72.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AMLA 57</td>
<td>American Language Verb Review I</td>
<td>1 unit</td>
<td>(May be taken two times for credit.) Pre-Collegiate</td>
<td>18.00</td>
<td>Degree Appropriate</td>
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<tr>
<td>AMLA 58</td>
<td>American Language Verb Review II</td>
<td>1 unit</td>
<td>(May be taken two times for credit.) Pre-Collegiate</td>
<td>18.00</td>
<td>Degree Appropriate</td>
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<tr>
<td>AMLA 59</td>
<td>American Language Prepositions</td>
<td>1 unit</td>
<td>(May be taken two times for credit.) Pre-Collegiate</td>
<td>18.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AMLA 60</td>
<td>American Language Verb Review III</td>
<td>1 unit</td>
<td>(May be taken two times for credit.) Pre-Collegiate</td>
<td>18.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AMLA 61</td>
<td>American Language Word Forms</td>
<td>1 unit</td>
<td>(May be taken two times for credit.) Pre-Collegiate</td>
<td>18.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AMLA 62</td>
<td>American Language Nouns and Articles</td>
<td>1 unit</td>
<td>(May be taken two times for credit.) Pre-Collegiate</td>
<td>18.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>ANAT 35</td>
<td>Human Anatomy</td>
<td>5 units</td>
<td>Pre-Collegiate</td>
<td>54.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>ANAT 36</td>
<td>Human Physiology</td>
<td>5 units</td>
<td>(CAN BIOL 12)</td>
<td>54.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>ANAT 40</td>
<td>Human Prospection</td>
<td>2 units</td>
<td>Pre-Collegiate</td>
<td>54.00</td>
<td>Degree Appropriate</td>
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<tr>
<td>ANAT 50</td>
<td>Basic Anatomy and Physiology</td>
<td>3 units</td>
<td>Pre-Collegiate</td>
<td>54.00</td>
<td>Degree Appropriate</td>
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<tr>
<td>ANTH 1</td>
<td>Biological Anthropology</td>
<td>3 units</td>
<td>Pre-Collegiate</td>
<td>54.00</td>
<td>Degree Appropriate</td>
</tr>
</tbody>
</table>
## Course Descriptions

### ANTH 1H — Biological Anthropology - Honors 3 Units (CAN ANTH 2) Degree Appropriate, CSU, UC 54.00 hours lecture.  
Prerequisite: Acceptance into the Honors Program  
The evolutionary biology of primates with particular emphasis on hominid evolution and behavior. The genetic and evolutionary mechanisms underlying evolution, human variation, primate field studies, and the hominid palentological record are stressed. This enriched course is designed for the honors program allowing, for example, more student directed discussions and more extensive writing assignments. Students may not receive credit for both ANTH 1 and ANTH 1H.

### ANTH 1L — Biological Anthropology Laboratory 1 Unit 54.00 hours lab.  
Degree Appropriate, CSU, UC  
Corequisite: ANTH 1 or ANTH 1H (May have been taken previously)  
Scientific study of human evolution. Students will generate and test hypotheses using the techniques and materials of biological anthropology. Includes genetic observations and calculations, osteological techniques and measurements, and primate behavior observations. One field trip to a zoo for primate observation is required.

### ANTH 2 — Elementary Arabic 4 Units 54.00 hours lecture.  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
Prerequisite: Eligibility for ENGL 68  
Introduction to the aims, methods and ethics of archaeological research and their application to the archaeological record, in contrast to popular depictions of archaeology. Evolution of culture from the earliest stone toolmakers to the primary civilizations of the Old and New Worlds, emphasizing invention and spread of agriculture and the impact of this change on prehistoric cultures.

### ANTH 3 — Archaeology 3 Units 54.00 hours lecture.  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
Prerequisite: Eligibility for ENGL 68  
The anthropological approach to the study of human behavior from a cross cultural, comparative, and an evolutionary perspective. An exploration into the languages, economics, sociopolitical systems, religions, and world views of diverse world cultures. A technical presentation is stressed as this course is designed for Social Sciences majors.

### ANTH 10 — Design I - Elements of Design 3 Units 36.00 hours lecture.  
Degree Appropriate, CSU, UC  
72.00 hours lab.  
Fundamentals of two- and three-dimensional design and design process. Elements include visualization, perception, presentation, expression, and site analysis of physical/contextual/cultural aspects of design and/or the urban environment. Portfolio will be produced.

### ARCH 11 — Architectural Drawing 3 Units 36.00 hours lecture.  
Degree Appropriate, CSU, UC  
72.00 hours lab.  
Advisory: Eligibility for MATH 51  
Basic graphic and drawing techniques, including architectural graphics, building construction fundamentals, and methods of drawings considered prerequisite to architectural design.

### ARCH 12 — Architectural Materials and Specifications 3 Units 54.00 hours lecture.  
Degree Appropriate, CSU, UC  
Application and development of construction materials. Formulation of materials specification used in architecture and the construction industry.

### ARCH 13 — Architectural Illustration 3 Units 36.00 hours lecture.  
Degree Appropriate, CSU, UC  
72.00 hours lab.  
Advisory: ARCH 11 or equivalent experience  
Architectural and interior illustration including perspective drawing, sketching, shades and shadows, entourage, and color application utilizing various media and development of project portfolio.

### ARCH 14 — Building and Zoning Codes 3 Units 54.00 hours lecture.  
Degree Appropriate  
Advisory: suitability for MATH 51  
Building and zoning codes, including code requirements related to architectural design and construction documentation. Process of obtaining design approvals and building permits from proper authorities having jurisdiction.

### ARCH 15 — Architectural Working Drawings - I 3 Units 36.00 hours lecture.  
Degree Appropriate, CSU, UC  
72.00 hours lab.  
Advisory: ARCH 11, ARCH 12, ARCH 14, and eligibility for MATH 51  
Methods and techniques used in the development of architectural construction documents for light frame structures (Type V construction) including construction theory, practice, and working drawings. Portfolio will be produced.

### ARCH 16 — Basic CAD and Computer Application 4 Units  (May be taken two times for credit.)  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
54.00 hours lab.  
Advisory: Eligibility for MATH 51  
Basic CAD (Computer Aided Design and Drafting) and computer application in architecture, engineering and related fields (including basic word processing, spreadsheet, CAD and presentation applications). Students who repeat this course will improve skills through further instruction and practice.
ARCH 18 — Architectural Computer Aided Design Elements 3 Units
(May be taken two times for credit.) Degree Appropriate
36.00 hours lecture. 72.00 hours lab.
Advisory: ARCH 11, ARCH 16 or equivalent experience
Intermediate CAD (Computer Aided Design and Drafting) specifically for architectural design and production. Portfolio of 2-D drawings and 3-D CAD models will be produced. Students who repeat this course will improve skills through further instruction and practice.

ARCH 21 — Design II - Architectural Design 3 Units
36.00 hours lecture. Degree Appropriate, CSU
72.00 hours lab.
Advisory: ARCH 10, ARCH 11 taken prior
Application of methods and theory used in architectural design projects. Includes graphic technique, design process, site analysis, presentation drawings and construction principles. Portfolio will be produced.

ARCH 23 — Architectural Presentations 3 Units
36.00 hours lecture. Degree Appropriate, CSU
72.00 hours lab.
Advisory: ARCH 10, ARCH 11 taken prior
Analysis and preparation of architectural presentation projects, including schematic and final design, architectural models, oral presentation techniques, board layouts using hand-drawn and computer-aided techniques, and development of project portfolio.

ARCH 26 — Architectural CAD Working Drawings 3 Units
(May be taken three times for credit.) Degree Appropriate
36.00 hours lecture. 72.00 hours lab.
Advisory: ARCH 15, ARCH 18 or equivalent experience
Advanced architectural CAD drawings. Portfolio of working drawing and presentation applications of integrated 2-D and 3-D CAD models will be produced. Students who repeat this course will improve skills through further instruction and practice.

ARCH 27 — Design III - Environmental Design 3 Units
36.00 hours lecture. Degree Appropriate, CSU
72.00 hours lab.
Advisory: ARCH 21, ARCH 23 or equivalent experience
Application of theory and principles of environmental design as applied to architecture, landscape architecture, urban design, urban planning and (civil) engineering. Portfolio will be produced.

ARCH 28 — Architectural CAD 3-D Illustration and Animation 3 Units
(May be taken three times for credit.) Degree Appropriate, CSU
36.00 hours lecture. 72.00 hours lab.
Advisory: ARCH 18 or equivalent experience
Intermediate to advanced architectural CAD in 3-D illustration, rendering and animation. Virtual "walk-through" and "fly-through" of interior/exterior 3-D models with photo-realistic materials and lighting will be produced. Students who repeat this course will improve skills through further instruction and practice.

ARCH 29 — Design IV - Advanced Project 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
36.00 hours lecture. 72.00 hours lab.
Advisory: ARCH 23, ARCH 27 or equivalent experience
Advanced design seminars and complex building design projects in architecture, including portfolio development. Students who repeat this course will improve skills through further instruction and practice.

ARCH 31 — World Architecture I 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Development of architecture including ancient Egypt, Europe through the Middle Ages, and classic civilizations of Asia and the Americas. Influence of geography, religion, and socio-economic movements on architecture.

ARCH 32 — World Architecture II 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Development of modern architecture from the Renaissance to the present day. Influence of environment, religion and socio-economic movements on architecture.

ARCH 89 — Architectural Work Experience 1 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.) 75.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
This course is designed to provide actual on-the-job experience in architecture at an approved work site which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. This course is available to students achieving a minimum of 12 units in architecture. Students who repeat this course will improve skills through further instruction and practice.

ARCH 90 — Architectural Work Experience 2 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.) 150.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
This course is designed to provide actual on-the-job experience in architecture at an approved work site which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. This course is available to students achieving a minimum of 12 units in architecture. Students who repeat this course will improve skills through further instruction and practice.

AHIS 1 — Understanding the Visual Arts 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Fundamentals of visual art forms and the role art plays in various historical periods and cultures. Students may not earn credit for both AHIS 1 and ARTB 1.

AHIS 1H — Understanding the Visual Arts - Honors 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
Fundamentals of visual art forms and the role art plays in various historical periods and cultures. An honors course designed to provide an enriched experience. Students may not receive credit for both AHIS 1H (formerly ARTA 1) and AHIS 1H.

AHIS 1H — Understanding the Visual Arts - Honors 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
Fundamentals of visual art forms and the role art plays in various historical periods and cultures. An honors course designed to provide an enriched experience. Students may not receive credit for both AHIS 1H (formerly ARTA 1) and AHIS 1H.

AHIS 2 — Topics in Visual Art and Culture 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: Eligibility for ENGL 1A
A thematic introduction to selected works of art and visual culture, providing a framework for understanding the relationship between art and society and the differing ways art can be viewed. A global and/or interdisciplinary approach will be taken. Topics will vary with instructor.

AHIS 2H — Topics in Visual Art and Culture - Honors 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
A thematic introduction to selected works of art and visual culture, providing a framework for understanding the relationship between art and society and the differing ways art can be viewed. A global and/or interdisciplinary approach will be taken. Topics will vary with instructor.

AHIS 3 — History of Women and Gender in Art 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
Survey of the roles of women and gender in cultural creation and production with a focus on the visual arts. A historical and global survey, covering the role of women artists in the history of art and the representation of gender in a variety of cultures and time periods.

AHIS 3H — History of Women and Gender in Art - Honors 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
Survey of the roles of women and gender in cultural creation and production with a focus on the visual arts. A historical and global survey, covering the role of women artists in the history of art and the representation of gender in a variety of cultures and time periods. An honors course designed to provide an enriched experience. Students may not receive credit for both AHIS 3 (formerly ARTA 3) and AHIS 3H.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Degree Appropriate</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHIS 4H</td>
<td>History of Western Art: Prehistoric Through Modern - Honors</td>
<td>3</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>Pre-requisite: Acceptance into the Honors Program. Western art from the Prehistoric through Modern periods demonstrating the relationship of various visual art forms to each other and to the cultural context in which they were produced. This is an honors course designed to provide an enriched experience. Students may not receive credit for both AHIS 4 (formerly ARTA 4) and AHIS 4H.</td>
</tr>
<tr>
<td>AHIS 5H</td>
<td>History of Western Art: Renaissance Through Modern - Honors</td>
<td>3</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>Pre-requisite: Acceptance into the Honors Program. Western art from the Renaissance through Modern periods demonstrating the relationship of various visual art forms to each other and to the cultural context in which they were produced. This is an honors course designed to provide an enriched experience. Students may not receive credit for both AHIS 5 (formerly ARTA 5) and AHIS 5H.</td>
</tr>
<tr>
<td>AHIS 6</td>
<td>History of Modern Art</td>
<td>3</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>Examine the artistic movements, influences, and individuals who have formed the Modern tradition. Emphasis is on the 20th century; the international and multicultural character of Modern art will be explored.</td>
</tr>
<tr>
<td>AHIS 6H</td>
<td>History of Modern Art - Honors</td>
<td>3</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>Pre-requisite: Acceptance into the Honors Program. Examine the artistic movements, influences, and individuals who have formed the Modern tradition. Emphasis is on the 20th century; the international and multicultural character of Modern art will be explored. An honors course designed to provide an enriched experience. Students may not receive credit for both AHIS 6 (formerly ARTA 6) and AHIS 6H.</td>
</tr>
<tr>
<td>AHIS 9</td>
<td>History of Asian Art</td>
<td>3</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>An examination of Asian artistic traditions. Major monuments of painting, sculpture, architecture and other visual art forms are studied within their religious and cultural contexts.</td>
</tr>
<tr>
<td>AHIS 9H</td>
<td>History of Asian Art - Honors</td>
<td>3</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>Pre-requisite: Acceptance into the Honors Program. An examination of Asian artistic traditions. Major monuments of painting, sculpture, architecture and other visual art forms are studied within their religious and cultural contexts.</td>
</tr>
<tr>
<td>AHIS 10</td>
<td>A History of Greek and Roman Art and Architecture</td>
<td>3</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>Pre-requisite: Eligibility for ENGL 68. A critical history of Greek and Roman art before 500 CE. Works of art and architecture will be examined in their cultural contexts. Historical perceptions of Classical art and culture and their impact on Europe and America will be studied.</td>
</tr>
</tbody>
</table>

### ART: ADVERTISING DESIGN/GRAPHICS

Cluster repeatability:
Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.

Cluster: ART 78A, ART 78B, ART 78C

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Degree Appropriate</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 60</td>
<td>Graphic Design: Lettering and Typography</td>
<td>3</td>
<td>36.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>Pre-requisite: Eligibility for ENGL 68. An entry level course emphasizing creative expression through a variation of design concepts, letter forms and style variation. Emphasis is placed on tools and techniques as applied to comprehensive graphic design images.</td>
</tr>
<tr>
<td>ART 66</td>
<td>Portfolio</td>
<td>3</td>
<td>36.00</td>
<td>Degree Appropriate</td>
<td>Pre-requisite: Completion of a minimum of 15 semester units in Advertising Design, Architectural Design, Art, Fashion Merchandising, Industrial Design, Interior Design or Photographics. This course aids individuals from any of the visual art disciplines to assemble a portfolio, book, or package of works of art (that represents their individual development, interests and/or strengths) for use to enter a four-year institution, professional art school, or a professional field of choice.</td>
</tr>
<tr>
<td>ART 68</td>
<td>Computer Graphics: Introduction</td>
<td>3</td>
<td>36.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>Pre-requisite: Completion of a minimum of 15 semester units in Advertising Design, Architectural Design, Art, Fashion Merchandising, Industrial Design, Interior Design or Photographics. This course aids individuals from any of the visual art disciplines to assemble a portfolio, book, or package of works of art (that represents their individual development, interests and/or strengths) for use to enter a four-year institution, professional art school, or a professional field of choice.</td>
</tr>
<tr>
<td>ART 74</td>
<td>Computer Graphics: Web Design</td>
<td>3</td>
<td>36.00</td>
<td>Degree Appropriate, CSU, UC</td>
<td>Pre-requisite: Completion of a minimum of 15 semester units in Advertising Design, Architectural Design, Art, Fashion Merchandising, Industrial Design, Interior Design or Photographics. This course aids individuals from any of the visual art disciplines to assemble a portfolio, book, or package of works of art (that represents their individual development, interests and/or strengths) for use to enter a four-year institution, professional art school, or a professional field of choice.</td>
</tr>
</tbody>
</table>
ARTC 77 — Computer Graphics: Exploring Digital Illustration 3 Units
(May be taken two times for credit.) Degree Appropriate
36.00 hours lecture.
72.00 hours lab.
Prerequisite: ARTC 70
Advisory: ARTC 66, ARTD 15A or ANIM 104
Basic principles of art, design and color as it applies to various aspects of digital illustration. Theory and production of creative illustrations through the use of Adobe Illustrator and Photoshop. Exploration of visual imagery for use in design, illustration and fine arts. Students who repeat this course will improve skills by further instruction and practice.

ARTC 78A — Work Experience in Advertising Design/Illustration 1 Unit
(May be taken four times for credit.) Degree Appropriate
(572x225)75.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
Provides students with on-the-job experience in advertising design, illustration and other graphic design and related areas in an approved worksite which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.

ARTC 78B — Work Experience in Advertising Design/Illustration 2 Units
(May be taken four times for credit.) Degree Appropriate
(572x225)150.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
Provides students with on-the-job experience in advertising design, illustration and other graphic design and related areas in an approved worksite which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.

ARTC 78C — Work Experience in Advertising Design/Illustration 3 Units
(May be taken four times for credit.) Degree Appropriate
(572x225)225.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
Provides students with on-the-job experience in advertising design, illustration and other graphic design and related areas in an approved worksite which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.

ARTC 161 — Graphic Design/Layout 3 Units
Degree Appropriate, CSU
(572x225)72.00 hours lab.
Prerequisite: ARTC 60
Provides an introduction to the graphic design process with an emphasis on visual communication strategies that explore type and image, layout and design development, and the use of symbols related to the field of advertising and graphic design. The course uses various traditional media and layout design-related software to explore concept utilization and production, visualization, and professional presentation techniques.

ARTC 165 — Illustration 3 Units
Degree Appropriate, CSU
(572x225)36.00 hours lecture.
72.00 hours lab.
Prerequisite: ARTC 20 or ARTD 15A or ANIM 104 or ARTC 17A or ANIM 101 (May have been taken previously)
Introduction to contemporary illustration with an emphasis on story, editorial, and advertising applications. Course covers the proper uses of illustrative rendering techniques in traditional drawing and painting media, paper, and their integration to electronic media. Using professional illustration software, peripherals, and color laser printers, students advance to produce more complex illustrations. Students who repeat this course will improve skills through further instruction and practice.

ARTC 171 — Computer Graphics 2: Advanced Layout and Design 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
(572x225)36.00 hours lecture.
72.00 hours lab.
Prerequisite: ARTC 70
Provides an introduction to multimedia design and basic animation using Macromedia Director. Introduces text and sound editing, image manipulation, and interactive design principles in the preparation of presentations, animations, and informational kiosks. Emphasis is placed on clarity of communication, design, and technical skills.

ART: ANIMATION

Cluster repeatability: Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.
Cluster: ANIM 137A, ANIM 137B, ANIM 137C

ANIM 101 — Drawing - Gesture and Figure 3 Units
(May be taken four times for credit.) Degree Appropriate, CSU
(572x225)36.00 hours lecture.
72.00 hours lab.
Explores contemporary and traditional approaches to sketching basic objects and the human figure using drawing techniques for rapid visualization. Emphasizes and develops perceptual and technical skills for capturing basic visual mechanics of motion and gesture. Students who repeat this course will improve skills through further instruction and practice.

ANIM 104 — Drawing Fundamentals 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
(572x225)36.00 hours lecture.
72.00 hours lab.
Emphasizes creative expression through the use of drawing media and techniques. Emphasis is placed on use of light logic, atmospheric and linear perspective. Includes basic drawing skills and methods of achieving compositional integrity through objective analysis and synthesis. Students who repeat this course will improve skills through further instruction and practice.
<table>
<thead>
<tr>
<th>Course Descriptions</th>
<th>Units</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANIM 107 — Figure in Motion</strong></td>
<td>3</td>
<td>Degree Appropriate</td>
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<tr>
<td>(May be taken four times for credit.)</td>
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<tr>
<td>36.00 hours lecture.</td>
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<tr>
<td>72.00 hours lab.</td>
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<tr>
<td><strong>ANIM 108 — Principles of Animation</strong></td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
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<td>(May be taken two times for credit.)</td>
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<tr>
<td>36.00 hours lecture.</td>
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<tr>
<td>72.00 hours lab.</td>
<td></td>
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<tr>
<td><strong>ANIM 109 — Advanced Principles of Animation</strong></td>
<td>3</td>
<td>Degree Appropriate</td>
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<tr>
<td>(May be taken four times for credit.)</td>
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<tr>
<td>36.00 hours lecture.</td>
<td></td>
<td></td>
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<tr>
<td>72.00 hours lab.</td>
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<tr>
<td><strong>ANIM 110 — Animal Drawing</strong></td>
<td>1.5</td>
<td>Degree Appropriate</td>
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<tr>
<td>(May be taken two times for credit.)</td>
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<tr>
<td>18.00 hours lecture.</td>
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<tr>
<td>36.00 hours lab.</td>
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<tr>
<td><strong>ANIM 111 — Portfolio</strong></td>
<td>1.5</td>
<td>Degree Appropriate</td>
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<tr>
<td>(May be taken four times for credit.)</td>
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<tr>
<td>18.00 hours lecture.</td>
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<tr>
<td>36.00 hours lab.</td>
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<tr>
<td><strong>ANIM 115 — Storyboarding</strong></td>
<td>3</td>
<td>Degree Appropriate</td>
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<tr>
<td>(May be taken four times for credit.)</td>
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<tr>
<td>36.00 hours lecture.</td>
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<tr>
<td>72.00 hours lab.</td>
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<tr>
<td><strong>ANIM 116 — Character Development</strong></td>
<td>1.5</td>
<td>Degree Appropriate</td>
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<tr>
<td>(May be taken four times for credit.)</td>
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<tr>
<td>18.00 hours lecture.</td>
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<tr>
<td>36.00 hours lab.</td>
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<tr>
<td><strong>ANIM 117 — Animation Background Layout</strong></td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
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<tr>
<td>(May be taken four times for credit.)</td>
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<tr>
<td>36.00 hours lecture.</td>
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<tr>
<td>72.00 hours lab.</td>
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<tr>
<td><strong>ANIM 118 — Background Painting</strong></td>
<td>3</td>
<td>Degree Appropriate</td>
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<tr>
<td>(May be taken three times for credit.)</td>
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<tr>
<td>36.00 hours lecture.</td>
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<tr>
<td>72.00 hours lab.</td>
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<tr>
<td><strong>ANIM 120 — Script Development for Animation</strong></td>
<td>3</td>
<td>Degree Appropriate</td>
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<td>(May be taken four times for credit.)</td>
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<tr>
<td>54.00 hours lecture.</td>
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<tr>
<td><strong>ANIM 122 — Modeling, Texture Mapping and Lighting</strong></td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
<tr>
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</tr>
<tr>
<td>36.00 hours lecture.</td>
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<td></td>
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<tr>
<td>72.00 hours lab.</td>
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<tr>
<td><strong>ANIM 123 — Animation Environment Layout</strong></td>
<td>3</td>
<td>Degree Appropriate</td>
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<tr>
<td><strong>ANIM 124 — Visual Effects I: Dynamics</strong></td>
<td>1.5</td>
<td>Degree Appropriate</td>
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<td><strong>ANIM 125 — Visual Effects II: Particle Systems</strong></td>
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<td><strong>ANIM 130 — Introduction to 3-D Computer Animation</strong></td>
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<td>Degree Appropriate</td>
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<tr>
<td><strong>ANIM 131 — Introduction to 3-D Computer Animation</strong></td>
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<td>Degree Appropriate</td>
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<td><strong>ANIM 132 — Animation Environment Layout</strong></td>
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<td>Degree Appropriate</td>
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Developing technical skills in the creation of a digital 3D environment. Design, model, texture, and light a 3D digital environment for a computer graphics game, TV program or film. Students who repeat this course will improve skills through further instruction and practice.
This course will improve skills through further instruction and practice. Students who repeat this course will improve skills through further instruction and practice.

ANIM 137B — Work Experience in New Digital Media
2 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
150.00 hours lab.
Advisory: Completion of the first and second semester of the Animation Program
This course provides college credit and instructional guidance in conjunction with work experience in areas of New Digital Media at an approved worksite related to a certificate or degree program of study. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.

ANIM 137C — Work Experience in New Digital Media
3 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
225.00 hours lab.
Advisory: Completion of the first and second semester of the Animation Program
This course is designed to provide college credit and instructional/advisory guidance in conjunction with actual on-the-job experience in areas of New Digital Media at an approved worksite related to a certificate or degree program of study. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.

ANIM 145 — Advanced 3-D Modeling
3 Units
(May be taken four times for credit.) Degree Appropriate
36.00 hours lecture.
72.00 hours lab.
Advisory: ANIM 132 or ANIM 132
An advanced course in 3-D modeling with a focus on designing, modeling, and rigging a character for animation. Students who repeat this course will improve skills through further instruction and practice.

ANIM 146 — Advanced 3-D Animation
3 Units
(May be taken four times for credit.) Degree Appropriate
36.00 hours lecture.
72.00 hours lab.
Advisory: ANIM 132 or 142
Animation of a pre-selected 3-D dynamic environment project and development of characteristics and personality of 3-D characters through animation. Students who repeat this course will improve skills through further instruction and practice.

ANIM 148 — Demo-Reel
1.5 Units
(May be taken four times for credit.) Degree Appropriate
18.00 hours lecture.
36.00 hours lab.
Prerequisite: ANIM 130
Production of a demo-reel representing student interest, strength and skill for entry into animation fields, professional schools or baccalaureate institutions. Students who repeat this course will improve skills through further instruction and practice.

ANIM 172 — Motion Graphics With After Effects
3 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
72.00 hours lab.
Prerequisite: ARTC 70
Explores the creative and technical processes for building motion-graphics using After Effects and/or other industry appropriate software. 2D and 3D compositing, animation, audio/video effects, editing and rendering of motion-graphics for video, CD, and DVD formats will be taught. Students who repeat this course will improve skills through further instruction and practice.

ANIM 175 — Web Animation With Flash
3 Units
(May be taken two times for credit.) Degree Appropriate
36.00 hours lecture.
72.00 hours lab.
Prerequisite: ARTC 70
Principles and design considerations of animation for the Web will be explored and developed through use of professional Web animation software. Students who repeat this course will improve skills through further instruction and practice.

ART 1 — Understanding the Visual Arts
3 Units
54.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Fundamentals of visual arts form and the role art plays in various historical periods and cultures. Students may not earn credit for both ARTB 1 and ART 1.

ART 14 — Basic Studio Arts
3 Units
36.00 hours lecture.
72.00 hours lab.
Prerequisite: Eligibility for ENGL 68
An entry level course designed for non-art majors emphasizing creative expression through the visual arts. Painting, drawing, printmaking and sculpture are explored to introduce the student through various media to the arts.

ART 20 — Art, Artists and Society
3 Units
36.00 hours lecture.
72.00 hours lab.
Explores art as a creative process and the role of an artist in contemporary and past societies approached through analysis of art exhibitions and artists' studio visitations. Emphasis on visual principles and content of historic and contemporary art works. Examines the dynamic and history of public art display and the nature of exhibition design with an overview of art movements, styles, symbols, theories and terms.

ART 21A — Introduction to Exhibition Production
3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
36.00 hours lecture.
72.00 hours lab.
Prerequisite: ART 20
Designed to familiarize all arts majors and serious artists with the concepts and hands-on applications of curatorial processes, management skills and gallery operations. Explores the professional side of the arts, emphasizing contemporary art, theories and media. Students who repeat this course will improve skills through further instruction and practice.

ART 21B — Intermediate Exhibition Production
3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
36.00 hours lecture.
72.00 hours lab.
Prerequisite: ART 21A
Provides increasing responsibility in exhibition planning, research, operation and management. Focuses on art as a profession with emphasis on historical/contemporary terms, theories, movements and media in the context of an art exhibition production. Students who repeat this course will improve skills through further instruction and practice.

ART 22A — Exhibition Design and Art Gallery
1 Unit
Operation Work Experience
(May be taken two times for credit.) Degree Appropriate
75.00 hours lab.
Prerequisite: ART 20, ART 21A, ART 21B
Provides on-the-job experience in exhibition design and art gallery operation in an approved work site which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.
Course Descriptions

**ARTG 22B — Exhibition Design and Art Gallery** 2 Units  
Operation Work Experience  
(May be taken two times for credit.)  
Degree Appropriate  
150.00 hours lab.  
Prerequisite: ARTG 20, ARTG 21A, ARTG 21B  
Provides on-the-job experience in exhibition design and art gallery operation in an approved work site which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.

**ARTG 22C — Exhibition Design and Art Gallery** 2 Units  
Operation Work Experience  
(May be taken two times for credit.)  
Degree Appropriate  
225.00 hours lab.  
Prerequisite: ARTG 20, ARTG 21A, ARTG 21B  
Provides on-the-job experience in exhibition design and art gallery operation in an approved work site which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.

**ARTS 30A — Ceramics: Beginning** 3 Units  
36.00 hours lecture.  
72.00 hours lab.  
Introduction to clay, glaze and firing through projects that employ techniques in hand building and on the wheel. Emphasis is on developing skills, vocabulary and analysis of form, function and aesthetics through projects and oral and written criticism.

**ARTS 30B — Ceramics: Beginning** 3 Units  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
72.00 hours lab.  
Prerequisite: ARTS 30A  
A continuation into the study of clay, glazes and firing, developing skills introduced in ARTS 30A. Emphasis is on more advanced techniques, using larger amounts of clay and developing the aesthetics of design through form, function and surface treatment.

**ARTS 31A — Ceramics: Intermediate** 3 Units  
36.00 hours lecture.  
72.00 hours lab.  
Prerequisite: ARTS 30B  
Integrating materials and design through advanced problems in the techniques of clay construction, glazing and firing.

**ARTS 31B — Ceramics: Intermediate** 3 Units  
36.00 hours lecture.  
72.00 hours lab.  
Prerequisite: ARTS 31A  
A continuation of ARTS 31A, examining the problems of aesthetically integrating materials and design by means of advanced problems in the technique of clay construction, glazing and firing. Emphasis is on integrating form and content, mixing glazes and the variety of firing processes.

**ARTS 33 — Ceramics: Hand Construction** 3 Units  
36.00 hours lecture.  
72.00 hours lab.  
Prerequisite: ARTS 40A  
Introduction to clay and glazes, and firing through projects that are hand built. Emphasis is on developing skills and vocabulary and analysis of form, function, aesthetics and craftsmanship through projects, discussion and oral/written criticism.

**ARTS 40A — Sculpture: Beginning** 3 Units  
36.00 hours lecture.  
72.00 hours lab.  
Advisory: ARTS 41 and/or ARTS 42  
An overview of traditional and contemporary approaches to sculpture. Emphasizes principles of sculptural design and concept development includes exploration of technique and materials as an integral part of creative expression.
### ART: TWO-DIMENSIONAL STUDIO ARTS

#### ARTD 15A — Drawing: Beginning [3 Units](CAN ART 8)
- **Degree Appropriate, CSU, UC**
- 36.00 hours lecture.
- 72.00 hours lab.
An entry level course emphasizing creative expression through the use of traditional drawing media. Emphasis is placed on basic drawing methods and skills, composition and exploration of drawing media.

#### ARTD 15B — Drawing: Beginning [3 Units]
- **Degree Appropriate, CSU, UC**
- 36.00 hours lecture.
- 72.00 hours lab.
**Prerequisite: ARTD 15A**
Drawing emphasizing further development of perceptual and technical skills attained in ARTD 15A. Students will advance their abilities in dry and fluid media, while expanding their use of the formal elements and principles in both representational and expressionist styles.

#### ARTD 16 — Drawing: Perspective [3 Units]
- Spring Semester
- **Degree Appropriate, CSU, UC**
- (May be taken two times for credit.)
- 36.00 hours lecture.
- 72.00 hours lab.
**Prerequisite: ARTD 15A or ANIM 104**
Drawing using the elements and principles of linear perspective with lights and shadows to represent natural and fabricated forms. Emphasizes methods and techniques directly related to the artist's needs. Students who repeat this course improve skills through further instruction and practice.

#### ARTD 17A — Drawing: Life [3 Units]
- **Degree Appropriate, CSU, UC**
- 36.00 hours lecture.
- 72.00 hours lab.
**Prerequisite: ARTD 15A or ANIM 104**
Explores both contemporary and traditional approaches to sketching/drawing the human figure. Surface anatomy, proportion, line, light and shadow, composition, and the expressive potential of the human figure will be explored.

#### ARTD 17B — Drawing: Life [3 Units]
- **Degree Appropriate, CSU, UC**
- 36.00 hours lecture.
- 72.00 hours lab.
Students will repeat ARTD 17A. Extends and expands the principles and techniques introduced in ARTD 17A. More emphasis is placed on personal interpretation, individual expression, and media exploration.

#### ARTD 20 — Design: Two Dimensional [3 Units]
- Spring Semester
- **Degree Appropriate, CSU, UC**
- (May be taken two times for credit.)
- 36.00 hours lecture.
- 72.00 hours lab.
Development of perception through study of the relationships of two-dimensional dynamics and organization. Emphasis is placed on the vocabulary, theory, and analysis of the formal elements and principles of all forms of art through lecture, discussion, oral and written criticism and testing as they apply to studio projects in design for all disciplines of the arts. Study will emphasize the fundamental organization and workings of the two-dimensional picture plane in black/white and achromatic value and basic color mixing. Students who repeat this course will improve skills through further study and practice.

#### ARTD 21 — Design: Color and Composition [3 Units]
- Spring Semester
- **Degree Appropriate, CSU, UC**
- (May be taken two times for credit.)
- 36.00 hours lecture.
- 72.00 hours lab.
**Prerequisite: ARTD 20 or equivalency determined by a portfolio review**
Synthesizes color theory and relationships of pigment and light. Emphasis will be placed on fundamental color harmonies, color matching, the effects of light, color perception and expression in their application to design and composition and as they are used in all other disciplines of the arts.

#### ARTD 22A — Drawing: Head and Hands [1.5 Units]
- **Degree Appropriate, CSU, UC**
- 18.00 hours lecture.
- 36.00 hours lab.
**Prerequisite: ARTD 15A or ANIM 104**
Contemporary and traditional approaches to constructing images of the human head and hands. Anatomy, proportion, light, logic, composition, expression and the interaction of form and content. Students who repeat this course will improve skills through further instruction and practice.

#### ARTD 25A — Painting: Beginning [3 Units]
- **Degree Appropriate, CSU, UC**
- (CAN ART 10)
- 36.00 hours lecture.
- 72.00 hours lab.
Emphasizes creative self-expression through the painting media. Students will develop the ability to conceptualize and solve compositional and technical painting problems.

#### ARTD 25B — Painting: Beginning [3 Units]
- **Degree Appropriate, CSU, UC**
- 36.00 hours lecture.
- 72.00 hours lab.
**Prerequisite: ARTD 25A**
An extension and expansion of principles and techniques introduced in ARTD 25A. More emphasis is placed on personal approach and individual expression.

#### ARTD 26A — Painting: Intermediate [3 Units]
- 36.00 hours lecture.
- **Degree Appropriate, CSU, UC**
- 72.00 hours lab.
**Prerequisite: ARTD 25B**
Develops a working knowledge of painting media. Painting problems are studied in order to broaden the student's knowledge of painting organization.

#### ARTD 26B — Painting: Intermediate [3 Units]
- 36.00 hours lecture.
- **Degree Appropriate, CSU, UC**
- 72.00 hours lab.
**Prerequisite: ARTD 26A**
Extends and expands the principles, techniques and painting problems that were introduced in ARTD 26A. More emphasis is placed on personal approach and expression.

#### ARTD 27 — Painting: Watercolor [3 Units]
- **Degree Appropriate, CSU, UC**
- (May be taken for option of letter grade or Credit/No Credit.)
- 36.00 hours lecture.
- 72.00 hours lab.
**Prerequisite: ARTD 15A OR ARTD 20 OR ARTD 25A**
Basic watercolor techniques as they relate to compositional and technical problems in painting. Emphasis is placed upon painting skills as related to transparent watercolor methods as well as exploration into opaque and mixed-media approaches. Students who repeat this course will improve skills through further instruction and practice.

#### ARTD 43 — Introduction to Printmaking [3 Units]
- **Degree Appropriate, CSU, UC**
- (May be taken two times for credit.)
- 36.00 hours lecture.
- 72.00 hours lab.
Introduction to creative techniques in fine art printmaking using relief and intaglio projects. Emphasis is on developing skills, vocabulary and critical understanding and analysis of its aesthetics, historical context, cultural traditions and craftsmanship through projects, discussion and oral/written criticism.

#### ARTD 44 — Printmaking: Relief and Lithography [3 Units]
- **Degree Appropriate, CSU, UC**
- (May be taken for option of letter grade or Credit/No Credit.)
- 36.00 hours lecture.
- 72.00 hours lab.
**Prerequisite: ARTD 43**
Creative techniques in fine art printmaking focusing on lithography. The possibilities of combination of planographic with relief methods will be explored. Emphasis is on developing skills, vocabulary and critical understanding and analysis of its aesthetics, historical context and craftsmanship through projects, discussion and oral/written criticism. Students who repeat this course will improve skills through further instruction and practice.
**ASTRONOMY**

**ASTR 5 — Introduction to Astronomy** 3 Units

A non-technical survey of the Universe. Fundamental concepts and facts of astronomy. Topics include the origin and evolution of planets, stars, and galaxies; results of space exploration and modern cosmology. Enroll in ASTR SL to receive laboratory science credit. Field trips may be required.

**ASTR 99 — Special Projects in Astronomy** 2 Units

Spring Semester (May be taken four times for credit.) Degree Appropriate, SU

In order to offer selected students recognition for their academic interests and abilities, and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have instructor’s authorization before enrolling in this class. Students who repeat this course will improve skills through further instruction and practice.

**ASTR SL — Astronomical Observing Laboratory** 1 Unit

Provides practical experience in astronomy including use of telescopes and demonstrations in the college planetarium. Occasional evening observing sessions with the telescopes and other field trips are required.

**ASTR 7 — Geology of the Solar System** 3 Units

54.00 hours lecture. Degree Appropriate, SU

A study of the Earth-like planets, satellites, and meteors, from a geological viewpoint. Surveys geological methods and their application to the study of cratons, tectonic and volcanic activity, weathering, rock formation, landsliding, erosion, faulting, etc. Emphasis on solar system bodies other than Earth. Field trips may be required.

**ASTR 8 — Introduction to Stars, Galaxies, and the Universe** 3 Units

54.00 hours lecture. Degree Appropriate, SU

Introduction to astronomy with emphasis on the structure and evolution of stars, galaxies, and the universe. Field trips(s) required.

**BIOLOGY**

**BIOL 1 — General Biology** 4 Units

54.00 hours lecture. Degree Appropriate, SU

Provides practical experience in astronomy including use of telescopes and demonstrations in the college planetarium. Occasional evening observing sessions with the telescopes and other field trips are required.

**BIOL 2 — Plant and Animal Biology** 4 Units

54.00 hours lecture. Degree Appropriate, SU

Prerequisite: BIOL 1 or BIOL 4; and MATH 71 or 2 years of high school algebra (C or better) or equivalent. Basic structures and functions of plants and animals including concepts in systematics, evolution, physiology, ecology, and biotic relationships.

**BIOL 3 — Ecology and Field Biology** 4 Units

54.00 hours lecture. Degree Appropriate, SU

Identification and ecological relationships of common local plants and animals. Emphasizes evolutionary relationships; ecology including cellular biology, energy relationships, biological systems, heredity, evolution and ecology. BIOL 1 is recommended for non-majors. BIOL 4 is recommended for biology majors and those majors requiring a more rigorous biology background.

**BIOL 4 — Biology for Majors** 4 Units

36.00 hours lecture. Degree Appropriate, SU

BIOL 4 + ZOOL 1 + BTNY 3 = BIOL SEQ A

54.00 hours lecture. 72.00 hours lab.

Prerequisite: CHEM 10 or CHEM 40 or one year of high school chemistry (C or better), AND MATH 71 or two years of high school algebra (C or better) or equivalent. Examines core principles of biology required for advanced study, including concepts of cellular and molecular biology, bioenergetics, genetics, reproduction, evolution, biodiversity and ecology. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both BIOL 4 and BIOL 4H.

**BIOL 4H — Biology for Majors - Honors** 4 Units

54.00 hours lecture. Degree Appropriate, SU

BIOL 4H + ZOOL 1 + BTNY 3 = CAN BIOL SEQ A

(May be taken four times for credit.) Degree Appropriate, SU

Students may not receive credit for both BIOL 4 and BIOL 4H.

**BIOL 5 — Contemporary Health Issues** 3 Units

54.00 hours lecture. Degree Appropriate, SU

Provides an overview of contemporary health issues known to affect the quality and longevity of life. Topics include: sexuality and reproduction, genetics, reproduction, evolution, biodiversity and ecology. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both BIOL 4 and BIOL 4H.

**BIOL 6 — Humans and the Environment** 3 Units

54.00 hours lecture. Degree Appropriate, SU

Prerequisite: Eligibility for ENGL 68

May satisfy the Health Education requirement for a California State Teaching Credential.

**BIOL 6L — Humans and the Environment Laboratory** 2 Units

108.00 hours lab. Degree Appropriate, SU

Corequisite: BIOL 6 (May have been taken previously)

Investigates major principles and problems of humans and the environment in the field and in the biological science laboratory. Most laboratory meetings will be conducted at off-campus locations. Some trips will require significant amounts of walking. Course includes one weekend field trip.
BIOL 8 — Cell and Molecular Biology 4 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Prerequisite: BIOL 4 or BIOL 4H, and CHEM 50
Introduction to cell and molecular biology including eukaryotic cells, eukaryotic organelles, protein structure and functions; DNA and RNA structure and functions; protein synthesis; genome organization in viruses, prokaryotes and eukaryotes; gene cloning; protein and DNA technology and applications of genetic engineering.

BIOL 12A — Natural History of California 3 Units
Fall Semester Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
54.00 hours lab.
Field study of the natural history of the Sierra Nevada and adjacent regions. One 3 day and one 4 day weekend field trip will be required.
Students may not receive credit for both BIOL 12A and GEOL 12A.

BIOL 12B — Natural History of California 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
54.00 hours lab.
Field study of Peninsular Ranges, Transverse Ranges, Mojave and Colorado Deserts of southern California. Laboratory work is done during one 3-day and one 4-day weekend field trip. Students may not receive credit for both BIOL 12B and GEOL 12B.

BIOL 13 — Human Reproduction, Development and Aging 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Provides a basic understanding of human development, from conception to death. Conception, growth, maturation and aging are studied as a natural continuum, influenced by our bio-physical and psycho-social environment. Several off-campus sites, related to course content, will be visited.

BIOL 15 — Human Sexuality 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
A survey of the biological, behavioral, cultural and ethical aspects of human sexuality.

BIOL 15H — Human Sexuality - Honors 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
A survey of the biological, behavioral, cultural and ethical aspects of human sexuality. An honors course designed to provide an enriched experience. Students may not receive credit for both BIOL 15 and BIOL 15H.

BIOL 17 — Neurobiology and Behavior 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
An integrated analysis of the biological, ecological and evolutionary bases of behavior (ethology.) Historical and evolutionary contexts are emphasized through a detailed consideration of the psychobiological, ecological, ontological and sociobiological determinants of animal behavior. Field trip required.

BIOL 20 — Marine Biology 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
An introduction to the marine environment including the principles of marine science, biology of marine invertebrates and vertebrates, structure and function of marine ecosystems, and human impact on the ocean. Field trip required.

BIOL 21 — Marine Biology Laboratory 1 Unit
54.00 hours lab. Degree Appropriate, CSU, UC
Corequisite: BIOL 20 (May have been taken previously)
An introduction to the field and laboratory aspects of the marine environment. Emphasizes the structure and functional biology of marine invertebrates and vertebrates, ecology of intertidal organisms and ecology of estuaries. Field trips required.

BIOL 99B — Special Projects in Biology 2 Units
18.00 hours lecture.
In order to offer students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have instructor’s authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to insure that proficiencies are enhanced.

BIOL 99B — Special Projects in Biology 2 Units
36.00 hours lecture.
In order to offer students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have instructor’s authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to insure that proficiencies are enhanced.

BUSA 11 — Fundamentals of Accounting 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: BUSA 11 or eligibility for MATH 51
Review of managerial accounting, job and process costing, cost-volume-profit analysis, cost behavior analysis and use, cost allocation, the budgeting process, responsibility accounting in a decentralized operation, standard costing, pricing decisions, relevant costs for decision making, segment reporting, variable costing, capital budgeting decisions, inventory management and analysis, and financial statement analysis. Gives the student the tools and methods needed for decision making.

BUSA 11 — Fundamentals of Accounting 3 Units
90.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: BUSA 7
Review of managerial accounting, job and process costing, cost-volume-profit analysis, cost behavior analysis and use, cost allocation, the budgeting process, responsibility accounting in a decentralized operation, standard costing, pricing decisions, relevant costs for decision making, segment reporting, variable costing, capital budgeting decisions, inventory management and analysis, and financial statement analysis. Gives the student the tools and methods needed for decision making.
### Course Descriptions

**BUSA 21 — Cost Accounting**  
4 Units  
18.00 hours lecture.  
Degree Appropriate  
Prerequisite: BUSA 8  
Detailed review of basic accounting concepts and principles and an in-depth analysis of the balance sheet and income statement. Emphasis is placed on the changing nature of principles and practices, the application of present-value concepts, the complexity of transactions that arise in a complex economic environment and the use of accounting information in decision making.

**BUSA 53 — Ten-Key Calculations**  
2 Units  
18.00 hours lecture.  
Degree Appropriate  
Prerequisite: BUSA 68 or eligibility for MATH 50  
Operation of electronic calculators by the touch method to solve business and accounting problems. Focuses on the application of calculator features to specific business concepts including banking records, payroll, invoice pricing and inventory.

**BUSA 58 — Federal Income Tax Law**  
3 Units  
54.00 hours lecture.  
Degree Appropriate  
Prerequisite: BUSA 7 or BUSA 72  
Federal and state income tax laws as related to individuals, partnership and corporation taxation including interpretations of recent changes. Emphasis is placed on individual income taxes and related problems in research through the use of a federal tax reporting service.

**BUSA 68 — Business Mathematics**  
3 Units  
54.00 hours lecture.  
Pre-Collegiate  
Reviews addition, subtraction, multiplication, division, decimals, percentages, fractions, sign numbers, equations and problem solving.

**BUSA 70 — Payroll and Tax Accounting**  
3 Units  
54.00 hours lecture.  
Degree Appropriate  
Prerequisite: Eligibility for BUSA 11  
Examine[s] all areas of on-the-job payroll accounting. Surveys the various tax procedures required by the employer and employee in filing the correct forms for Social Security, federal, and state income taxes and their reconciliation. Laws related to Worker's Compensation, State Disability Benefit Laws and Fair Employment Practices are discussed.

**BUSA 71 — Financial Planning**  
3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
Functional approach to personal finance, including budget systems, consumer credit, health care, insurance, debt collection systems, status obligations, accumulating reserves, examines short-term and long-term financial goals. Applicable for personal and professional use.

**BUSA 72 — Bookkeeping - Accounting**  
5 Units  
90.00 hours lecture.  
Degree Appropriate  
Prerequisite: BUSA 68 or eligibility for MATH 50  
Fundamental bookkeeping and accounting principles including the accounting cycle for service and merchandising companies, cash management, payroll and special journals. Computerized simulations and completion of a practice set.

**BUSA 75 — Using Microcomputers in Financial Accounting**  
1 Unit  
18.00 hours lecture.  
Degree Appropriate  
Prerequisite: BUSA 7 or BUSA 72  
Application of basic accounting concepts utilizing a computerized ledger software program. Hands-on use of a microcomputer to process accounting transactions, prepare statements and reports, and complete accounting cycle tasks. Completion of a computerized accounting practice set will be required.

**BUSA 76 — Using Microcomputers in Managerial Accounting**  
1 Unit  
18.00 hours lecture.  
Degree Appropriate  
Prerequisite: BUSA 7 or BUSA 72  
Analyze financial data and prepare managerial accounting reports using Excel software. Development of “what-if” formulas to be used as an aid in decision-making. Manufacturing and consolidation worksheets, financial statement analysis, and statement of cash flows.

**BUSA 81 — Work Experience in Accounting**  
1 Unit  
(54.00 hours lab.) (May be taken for Credit/No Credit only.)  
Degree Appropriate  
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog  
Advisory: BUSA 7 or BUSA 72  
Provides accounting students with actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. Work experience placement is not guaranteed but assistance is provided. Students who repeat this course will improve their skills through further instruction and practice.

**BUSA 84 — Work Experience in Accounting**  
3 Units  
(54.00 hours lab.) (May be taken four times for credit.)  
Degree Appropriate  
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog  
Advisory: BUSA 7 OR BUSA 72  
Provides accounting students with actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. Work experience placement is not guaranteed but assistance is provided. Students who repeat this course will improve their skills through further instruction and practice.

**BUSA 85 — Work Experience in Accounting**  
4 Units  
(150.00 hours lab.) (May be taken for Credit/No Credit only.)  
Degree Appropriate  
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog  
Advisory: BUSA 7 OR BUSA 72  
Provides accounting students with actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. Work experience placement is not guaranteed but assistance is provided. Students who repeat this course will improve their skills through further instruction and practice.

**BUSC 1A — Principles of Economics - Macroeconomics**  
3 Units  
(CAN ECON 2)  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
Prerequisite: Eligibility for ENGL 1A  
Principles of aggregate economic analysis; economic cycles including recession, unemployment, inflation and economic growth; national income accounts; money and financial institutions; monetary and fiscal policy; alternative economic viewpoint; budget deficits and public debts; international trade and finance.
### Business and Economics Courses

**BUSC 1A — Principles of Economics - Macroeconomics** 3 Units
(CAN ECON 2)  Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: Acceptance into the Honors Program
Principles of aggregate economic analysis; economic cycles including recession, unemployment, inflation and economic growth; national income accounts; money and financial institutions; monetary and fiscal policy; alternative economic viewpoint; budget deficits and public debts; international trade and finance.

**BUSC 1AH — Principles of Economics - Macroeconomics - Honors** 3 Units
(CAN ECON 4)  Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: Acceptance into the Honors Program
Economic analysis with emphasis on price and distribution theory, scarcity, opportunity costs, supply, demand, elasticity; cost theory; price and output determination under various market structures; factor markets; public choice; income distribution; externalities and government regulation; comparative economic systems.

**BUSC 1B — Principles of Economics - Microeconomics** 3 Units
(CAN ECON 4)  Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: BUSC 1A
Economic analysis with emphasis on price and distribution theory, scarcity, opportunity costs, supply, demand, elasticity; cost theory; price and output determination under various market structures; factor markets; public choice, income distribution, externalities and government regulations; comparative economic systems.

**BUSC 1BH — Principles of Economics - Microeconomics - Honors** 3 Units
(CAN ECON 4)  Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: Acceptance into the Honors Program
Economic analysis with emphasis on price and distribution theory, scarcity, opportunity costs, supply, demand, elasticity; cost theory; price and output determination under various market structures; factor markets; public choice, income distribution, externalities and government regulations; comparative economic systems.

**BUSC 17A — Applied Business Statistics** 3 Units
Fall Semester  Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: MATH 71 or four semesters of high school algebra (C or better) in the last two semesters
Statistical reasoning and application of primary statistical techniques used in solving managerial problems. Topics include: collection and interpretation of data, measures of central tendency and dispersion, probability distributions, sampling and estimation, hypothesis testing, analysis of variance, linear regression and correlation and index numbers.

**BUSL 18 — Business Law** 3 Units
54.00 hours lecture.  Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Principles of business law emphasizing legal setting of business, nature of the law and court procedure, principles of contract law, sales of goods under the Uniform Commercial Code, personal property, bailments, and secured transactions.

**BUSL 19 — Advanced Business Law** 3 Units
54.00 hours lecture.  Degree Appropriate, CSU, UC
Advisory: BUSL 18
Principles of business law emphasizing commercial paper, agency, partnerships, corporations, bankruptcy, regulation of trade and real property.

**BUSL 20 — Principles of Business** 3 Units
54.00 hours lecture.  Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Study of business and its functions, background, development, organization, and opportunities. Business terms, current trends, methods, contemporary and future problems, and current business practices are covered.

**BUSL 25 — Principles of E-Commerce** 3 Units
54.00 hours lecture.  Degree Appropriate, CSU
Advisory: Eligibility for ENGL 68 or BUSO 5
An overview of the effects of culture on business communication and interaction. Cultural roles and components are described and related to the business environment and the student’s own culture.

**BUSM 10 — Principles of Continuous Quality Improvement** 3 Units
54.00 hours lecture.  Degree Appropriate, CSU
Advisory: Eligibility for ENGL 68 or BUSO 5
History and evolution of thought in Continuous Quality Improvement, including the theories and methods of Deming, Juran and Crosby. The quality management process and tools for the continuous improvement of quality are presented. Relevant case studies are included.

**BUSM 12 — Continuous Quality Improvement Team Building** 3 Units
Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Advisory: BUSM 10
Comprehensive instruction in building and using Continuous Quality Improvement project teams including selection of team members and evaluation of team performance. Includes creating and evaluating problem solutions, applying tools for improvement planning, team decision making, and building an effective improvement plan.

**BUSM 19 — Principles of International Business** 3 Units
54.00 hours lecture.  Degree Appropriate, CSU
Prerequisite: Eligibility for ENGL 68
An overview of the rapidly changing international business environment, including the theories and methods of Deming, Juran and Crosby. The quality management process and tools for the continuous improvement of quality are presented. Relevant case studies are included.

**BUSM 20 — Principles of Business** 3 Units
54.00 hours lecture.  Degree Appropriate, CSU
Prerequisite: Eligibility for ENGL 68
Study of business and its functions, background, development, organization, and opportunities. Business terms, current trends, methods, contemporary and future problems, and current business practices are covered.
Course Descriptions

BUSB 60 — Human Relations in Business 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Behavior, personality, self-management, self-development, and elementary business psychology as an aid to furthering the student's business advancement and lifelong learning. Class discussions focus on the student's understanding of interpersonal effectiveness with emphasis on communications, motivation, leadership and other related areas.

BUSB 61 — Business Organization and Management 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: BUSM 20 Functions of management, techniques of decision making and problem solving, and methods used by the manager to achieve organizational goals. Various theories of management, lines of authority, functions of departments, and the importance of policies, procedures, and controls are discussed.

BUSB 62 — Human Resource Management 3 Units
54.00 hours lecture. Degree Appropriate
Direction of people including guidance, control supervisory problems, training, job analysis interviewing, testing, rating, and other functions involving human resources. Designed to improve the overall understanding of the relationship between the individual and the business organization.

BUSB 66 — Small Business Management 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Practical problems encountered in organizing and operating a small business enterprise: initiating the business, financial and administrative control, legal and government relationships and other related considerations.

BUSB 81 — Work Experience in Business 1 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
75.00 hours lab.
Corequisite: BUSM 20 (May have been taken previously)
Provides business students with actual on-the-job experience in an approved worksite which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. Work Experience placement is not guaranteed but assistance is provided by the business faculty. Students who repeat this course will improve skills through further instruction and practice.

BUSB 82 — Work Experience in Business 2 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
150.00 hours lab.
Corequisite: BUSM 20 (May have been taken previously)
Provides business students with actual on-the-job experience in an approved worksite which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. Work Experience placement is not guaranteed but assistance is provided by the business faculty. Students who repeat this course will improve skills through further instruction and practice.

BUSB 83 — Work Experience in Business 3 Units
(May be taken four times for credit.) Degree Appropriate
225.00 hours lab.
Corequisite: BUSM 20 (May have been taken previously)
Provides business students with actual on-the-job experience in an approved worksite which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each unit of credit. Work Experience placement is not guaranteed but assistance is provided by the business faculty. Students who repeat this course will improve skills through further instruction and practice.

BUSB 84 — Work Experience in Business 4 Units
(May be taken four times for credit.) Degree Appropriate
Spring Semester
300.00 hours lab.
Corequisite: BUSM 20 (May have been taken previously)
Provides business students with actual on-the-job experience in an approved worksite which is related to classroom-based learning. A minimum of 75 paid or 60 non-paid clock hours per semester is required for each unit of credit. Work Experience placement is not guaranteed but assistance is provided by the business faculty. Students who repeat this course will improve skills through further instruction and practice.

BUSB 85 — Special Issues in Business 2 Units
Spring Semester
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
Provide business majors with a forum to gain knowledge, develop techniques, problem solve and implement an actual business plan. Special emphasis will be placed on the particular project of the actual business used as the class project. Students who repeat this course will improve skills through further instruction and practice.

BUSB 86 — Introduction to Paralegal/Legal Studies 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Corequisite: PLGL 30 or BUSL 30 (May have been taken previously)
Provides an introduction to the legal field and its function in society, including history, organization, legal ethics, and the effects of historical and social change on the structure of the legal system. Emphasis will be placed on the development of skills necessary to perform effective case research and writing. The course is designed to provide a knowledge base necessary for entry level employment in a paralegal field.

Business: Paralegal

PLGL 30 — Introduction to Paralegal/Legal Studies 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Basic knowledge required of paralegals. An overview of the federal and state legal systems, the relationship of paralegals to attorneys, an introduction to legal writing and research investigation of claims and legal ethics.

PLGL 31A — Legal Analysis and Writing 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Corequisite: PLGL 30 or BUSL 30 (May have been taken previously)
Use of a law library for legal research and references, reading and analyzing codes and statutes, and preparation of case briefs and research reports.
**Course Descriptions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Hours</th>
<th>Prerequisites/Advisories</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLGL 31B</td>
<td>Advanced Legal Analysis and Writing</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Pre-requisite: PLGL 30 and PLGL 31A&lt;br&gt;Preparation of research memoranda, trial briefs, appellate briefs and other paralegal documents. Continuation of PLGL 31A, Legal Analysis and Writing.</td>
</tr>
<tr>
<td>PLGL 33A</td>
<td>Civil Procedure Pretrial</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Corequisite: PLGL 30 (May have been taken previously)&lt;br&gt;Analysis of the pretrial procedural steps to litigating a cause of action. Examines the concepts of jurisdiction, venue, parties to the action, summons, default judgments, and pleadings.</td>
</tr>
<tr>
<td>PLGL 33B</td>
<td>Civil Procedure-Trial and Post-Trial</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Prerequisite: PLGL 33A&lt;br&gt;Preparing for litigation. Includes discovery, preparation of law and motion documents, remedies, summary judgments, motions to dismiss, settlements, and arbitration.</td>
</tr>
<tr>
<td>PLGL 35A</td>
<td>Law Office Procedures</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Advisory: PLGL 30&lt;br&gt;Examine procedures utilized by a paralegal in a law office. Includes knowledge of court systems, preparation and filing of legal papers and court documents, and drafting specialized documents in such areas as estate planning, real estate, divorce, unlawful detainer, adoption, corporations, conservatorships and guardianships.</td>
</tr>
<tr>
<td>PLGL 35B</td>
<td>Automated Law Office Procedures</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Prerequisite: PLGL 35A&lt;br&gt;Corequisite: PLGL 30 (May have been taken previously)&lt;br&gt;Advisory: CISB 15 or equivalent computer experience&lt;br&gt;Use of the personal computer for special purposes in the law office; includes the drafting of pleadings, legal research, document control, preparation of billing, law office and case load management, and tax reports.</td>
</tr>
<tr>
<td>PLGL 36</td>
<td>Paralegal Internship</td>
<td>1</td>
<td>75</td>
<td>Degree Appropriate, CSU&lt;br&gt;(May be taken two times for credit.)&lt;br&gt;75.00 hours lab.&lt;br&gt;Pre-requisite: PLGL 31A, PLGL 33A, and PLGL 35A&lt;br&gt;Corequisite: PLGL 31B, PLGL 33B, PLGL 35B, PLGL 37, PLGL 39 (May have been taken previously)&lt;br&gt;Designed to provide the student with actual on-the-job experience in the paralegal profession which relates to student's classroom based learning. Placement is not guaranteed but assistance is provided by the paralegal faculty. A minimum of five hours per week of supervised work (minimum 75 paid clock hours or 60 non-paid clock hours per semester) is required. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PLGL 37</td>
<td>Tort Law</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Pre-requisite: PLGL 31A, PLGL 33A, PLGL 35A&lt;br&gt;Analysis of the law of torts including intentional torts such as assault, battery, false imprisonment, defamation, privacy, trespass and nuisance, negligence, and strict liability. Examination of insurance defense issues.</td>
</tr>
<tr>
<td>PLGL 38</td>
<td>Employment and Ethical Issues in Paralegalism</td>
<td>2</td>
<td>36</td>
<td>Degree Appropriate, CSU&lt;br&gt;Corequisite: PLGL 31B, PLGL 33B, PLGL 35B, PLGL 37, PLGL 39 (May have been taken previously)&lt;br&gt;Job search skills including preparation of professional resumes and cover letters, interviewing techniques, networking, application of these skills in beginning the search for paralegal employment, and paralegal and attorney ethics.</td>
</tr>
<tr>
<td>PLGL 39</td>
<td>Contract Law</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Laws relating to the formation of contracts. Includes study of the statute of frauds, third-party rights, liability for breach of contract, remedies, discharge, and the Uniform Commercial Code.</td>
</tr>
<tr>
<td>PLGL 40</td>
<td>Landlord-Tenant Law</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Pre-requisite: PLGL 31B, PLGL 33A, PLGL 35A&lt;br&gt;Landlord-tenant law and creation of legal documentation to represent the landlord-tenant relationship. Examination of the rights and liabilities of the landlord and the tenant.</td>
</tr>
<tr>
<td>PLGL 41</td>
<td>Property Law</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Corequisite: PLGL 35A&lt;br&gt;Examination of the law relating to real and personal property. Analysis of the various forms of ownership of real property; easements, covenants, conditions, and licenses; constitutional questions; types of real estate deeds; and land use controls.</td>
</tr>
<tr>
<td>PLGL 42</td>
<td>Family Law</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Pre-requisite: PLGL 35A&lt;br&gt;Examination of the law relating to marriage, dissolution, nullity, and legal separation. Includes topics of community property, child custody, child support, spousal support, and premarital/ante-nuptial agreements.</td>
</tr>
<tr>
<td>PLGL 43</td>
<td>Wills and Trusts</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Pre-requisite: PLGL 35A&lt;br&gt;Legal principles of the laws of wills and trusts, organization and jurisdiction of the California Probate Courts, estate planning and estate taxes.</td>
</tr>
<tr>
<td>PLGL 44</td>
<td>Bankruptcy Law</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Pre-requisite: PLGL 35A&lt;br&gt;Bankruptcy law involving personal and corporate bankruptcy proceedings and arrangements. Includes wage earner plans and insolvency proceedings.</td>
</tr>
<tr>
<td>PLGL 45</td>
<td>Creditors’ Rights</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Creation, perfection, and enforcement of security interests in property. Unsecured creditors and their methods of enforcing rights and obtaining judgments.</td>
</tr>
<tr>
<td>PLGL 47A</td>
<td>Litigation Procedures</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;(May be taken two times for credit.)&lt;br&gt;Overview of litigation procedures. Description of a trial and trial presentations are emphasized. Preparation of opening statements, direct and cross examinations, and closing statements. Elements of oral argument are examined. Methods of responding to questioning are analyzed. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PLGL 47B</td>
<td>Litigation Practice</td>
<td>1.5</td>
<td>27</td>
<td>Degree Appropriate, CSU&lt;br&gt;(May be taken two times for credit.)&lt;br&gt;Students will present a case and evaluate the effectiveness of their presentation. Continuous revision of opening arguments, closing arguments, direct examinations, and cross-examinations. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PLGL 48</td>
<td>Criminal Law and Procedures</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;General principles of criminal law and procedure, elements of crimes against person and property, parties to a crime, defenses to crimes. Analysis of procedural law relating to arrest, search and seizure, rights to counsel and a jury, evidentiary issues, sentencing and appeal.</td>
</tr>
<tr>
<td>PLGL 49</td>
<td>Evidence Law</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Pre-requisite: PLGL 35A&lt;br&gt;Examination of evidence law in civil and criminal cases; principles of relevance and competence of evidence; hearsay and character evidence rules; evidentiary privileges; use and authentication of writings. Use of evidence at trial, burdens of proof and presumptions, constitutional issues.</td>
</tr>
<tr>
<td>PLGL 50</td>
<td>Comparative Law</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU&lt;br&gt;Advisory: Eligibility for ENGL 1A&lt;br&gt;A comparison of the traditions and legal systems of various nations. Specific legal concepts and principles relating to areas of business, substantive law, and procedural law are compared to illustrate and distinguish those systems from the U.S. system. Ethics, language, and management issues are considered with regard to doing business abroad.</td>
</tr>
</tbody>
</table>
BUSINESS: REAL ESTATE

**BUSR 50 — Real Estate Principles**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Introductory real estate law, public control, property valuation, finance, and real estate practice. Meets some of the California Real Estate Salesperson and Broker License requirements and meets 30 hours toward Basic Appraisal Procedures 2008 Appraiser Qualifications Board (AQB) requirements for certified-residential/certified-general appraiser license. Also provides 30 hours toward office of real estate Appraisers (OREA) requirements for state licensing.

**BUSR 51 — Legal Aspects of Real Estate**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Prerequisite: BUSR 50 or employment in the real estate field

Real estate contracts, leases, deeds, foreclosures, homesteads, agency, and disclosures. Can be used to meet the additional educational requirements for the salesperson or broker license.

**BUSR 52 — Real Estate Practice**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Corequisite: BUSR 50. May have been taken previously, or employment in the real estate field.

Office procedures and practices in listings, advertising, prospecting, financing, exchanges, property management, salesmanship, land utilization and public relations. Must be completed prior to applying to take the Salesperson License Exam.

**BUSR 52D — Real Estate Practice Work Experience**  
3 Units  
225.00 hours lab.

Corequisite: BUSR 50 and not possessing a permanent California real estate license at time of enrollment. Student must be enrolled in seven units minimum including work experience units.

Provides a minimum of 180 hours of on-site real estate office and/or field work experience under the supervision of a licensed California real estate professional and a college instructor/coordinator. Designed to satisfy Department of Real Estate licensing requirements serving as an equivalent to BUSR 52. Students who repeat this course will improve their skills through further instruction and practice.

**BUSR 53 — Real Estate Finance**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Prerequisite: BUSR 50 or employment in the real estate field

Real estate financing sources, loans underwriting, applications, and appraisals. Can be used to meet the additional educational requirement of the salesperson or broker license.

**BUSR 55 — Real Estate Economics**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Prerequisite: BUSR 50 or employment in the real estate field

Analysis of international, national and local factors which determine the value of real estate. Required by the DRE for the real estate broker license and may be used as the elective course for the salesperson license.

**BUSR 57 — Income Tax Aspects of Real Estate Investments**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Current income tax principles governing the acquisition, ownership, operation and disposition of real property investments with special emphasis on tax planning and integration of tax concepts with procedural aspects. May be used as an elective course to satisfy one of the California Department of Real Estate's requirements for the salesperson or broker license.

**BUSR 59 — Real Estate Property Management**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Prerequisite: BUSR 50 or employment in the real estate field

Property management for owners and managers of residential and commercial income properties. Meets California real estate license requirements for salesperson and broker.

**BUSR 60 — Real Estate Investment Planning**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Prerequisite: BUSR 50 or employment in the real estate field

A comprehensive analysis of various investment strategies, techniques, systems, and theories involving all forms of real estate with particular emphasis on research methods needed for successful investing.

**BUSR 62 — Mortgage Loan Brokering and Lending**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Prerequisite: BUSR 50 or employment in the real estate field

Overview of the technical knowledge of the State and Federal laws that govern the practice of mortgage loan brokerage and lending in the State of California as well as mortgage lending history and process. May be used as an elective for the salesperson or broker license.

**BUSR 76 — Escrow Procedures I**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Prerequisite: BUSR 76

A case study method of escrow procedures including processing of sale escrows with and without new trust deed financing; learning and using the vocabulary of escrow; and preparing and processing escrow closing packages. Emphasis on research methods needed for successful escrowing.

**BUSR 77 — Escrow Procedures II**  
3 Units  
54.00 hours lecture.  
Degree Appropriate

Prerequisite: BUSR 76

Advanced escrow procedures covering the unusual and difficult types of escrows and evaluating the possible solutions. Emphasis on research methods needed for successful escrowing, counseling and handling of escrows from inception to closing.

**BUSR 81 — Appraisal: Principles and Procedures**  
3.5 Units  
54.00 hours lecture.  
Degree Appropriate

Principles and procedures of appraising real property with emphasis on residential properties. Required by Office of Real Estate Appraisers (OREA) for all appraisal licenses and by the Department of Real Estate (DRE) for real estate broker license. Provides 60 hours toward OREA requirements for state licensing. Includes all topics listed in Appraisal Qualifications Board (AQB) Basic Appraisal Principles and Basic Appraisal Procedures modules. May be used as the elective course for the salesperson license.

**BUSR 82 — Uniform Standards of Professional Appraisal Practice**  
1 Unit  
18.00 hours lecture.  
Degree Appropriate

Emphasizes appraisal standards and professional ethics. Meets the national 15-hour Uniform Standards of Professional Appraisal Practice (USPAP) requirement for initial licensing by the Office of Real Estate Appraisers (OREA).

**BUSR 83 — Residential Appraisal**  
3.5 Units  
54.00 hours lecture.  
Degree Appropriate

Includes all topics listed in Appraisal Qualifications Board (AQB) Modules: Residential Market Analysis and Highest and Best Use, Residential Appraiser Site Valuation and Cost Approach, and Residential Sales Comparison and Income Approaches. Required by Office of Real Estate Appraisers (OREA) for all appraisal licenses and provides 60 hours toward OREA requirements for appraisal licensing. May be used as the elective course for the salesperson license or the required appraisal course for broker license.

**BUSR 84 — Residential Appraisal: Case Studies**  
2.5 Units  
45.00 hours lecture.  
Degree Appropriate

Emphasizes residential appraisal case studies, report writing, statistics, modeling, and finance. Required by Office of Real Estate Appraisers (OREA) for all appraisal licenses. Provides 45 hours toward OREA requirements for state licensing. Includes all topics listed in Appraisal Qualifications Board (AQB) Modules: Residential Report Writing and Case Studies; Statistics, Modeling, and Finance; and Advanced Residential Applications and Case Studies.

BUSR 85 — Commercial Appraisal

**BUSR 86 — Commercial Appraisal: Case Studies**  
2.5 Units  
45.00 hours lecture.  
Degree Appropriate

Emphasizes commercial appraisal case studies, report writing, statistics, modeling, and finance. Required by Office of Real Estate Appraisers (OREA) for all appraisal licenses. Provides 45 hours toward OREA requirements for state licensing. Includes all topics listed in Appraisal Qualifications Board (AQB) Modules: Residential Report Writing and Case Studies; Statistics, Modeling, and Finance; and Advanced Residential Applications and Case Studies.

**BUSINESS: SALES, MERCHANDISING AND MARKETING**

Cluster repeatability:

Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.

Cluster: BUS 79, BUS 80, BUS 81, BUS 82

**BUSB 33 — Advertising and Promotion**  
3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU

Characteristics and role of advertising and promotion in business are explored. Emphasis is placed on promotional mix, trend and forecast research, and developing a comprehensive multimedia promotion plan including advertising layout and copy. Students may not receive credit for both BUS 33 and FASH 63.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUSS 35 — Professional Selling</strong></td>
<td>3</td>
<td>Principles of selling and the role of a salesperson in the marketing process. Includes characteristics and skills necessary for a successful salesperson, techniques for prospecting and/or qualifying buyers, buyer behavior and critical steps in the selling process. Students develop and offer a sales presentation for a selected product, service or concept.</td>
</tr>
<tr>
<td><strong>BUSS 36 — Principles of Marketing</strong></td>
<td>3</td>
<td>Organization and function of system of distributing goods and services from the point of production to the consumer. Preparation of a marketing plan using product, distribution, promotional and pricing strategies.</td>
</tr>
<tr>
<td><strong>BUSS 50 — Retail Store Management and Merchandising</strong></td>
<td>3</td>
<td>Principles and practices used in the management and merchandising of retail stores. Includes all aspects of the critical buying function, merchandising, promotional techniques, site selection, layout, staffing, market positioning and customer service. Students may not receive credit for both FASH 62 and BUSS 50.</td>
</tr>
<tr>
<td><strong>BUSS 79 — Work Experience in Marketing Management</strong></td>
<td>1</td>
<td>(May be taken four times for credit.) Degree Appropriate 75.00 hours lab. Prerequisite: BUSS 33 or BUSS 35 or BUSS 36 or BUSS 50 and compliance with Work Experience regulations as designated in the College Catalog. Provides marketing students with actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work Experience placement is not guaranteed but assistance is provided by the business faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>BUSS 80 — Work Experience in Marketing Management</strong></td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate 150.00 hours lab. Prerequisite: BUSS 33 or BUSS 35 or BUSS 36 or BUSS 50 and compliance with Work Experience regulations as designated in the College Catalog. Provides marketing students with actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work Experience placement is not guaranteed but assistance is provided by the business faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>BUSS 81 — Work Experience in Marketing Management</strong></td>
<td>3</td>
<td>(May be taken for Credit/No Credit only.) Degree Appropriate 225.00 hours lab. Prerequisite: BUSS 33 or BUSS 35 or BUSS 36 or BUSS 50 and compliance with Work Experience regulations as designated in the College Catalog. Provides marketing students with actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work Experience placement is not guaranteed but assistance is provided by the business faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>BUSS 82 — Work Experience in Marketing Management</strong></td>
<td>4</td>
<td>(May be taken four times for credit.) Degree Appropriate 300.00 hours lab. Prerequisite: BUSS 33 or BUSS 35 or BUSS 36 or BUSS 50 and compliance with Work Experience regulations as designated in the College Catalog. Provides marketing students with actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work Experience placement is not guaranteed but assistance is provided by the business faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>BUSS 85 — Special Issues in Marketing</strong></td>
<td>2</td>
<td>(May be taken two times for credit.) Degree Appropriate 36.00 hours lecture. Prerequisite: BUSS 33 or BUSS 35 or BUSS 36 or BUSS 50. Provides marketing majors with a forum to gain knowledge, develop techniques, problem solve, and implement an actual business marketing plan. Special emphasis will be placed on the particular project of the actual business used as the class project. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>CHMT 1 — Introduction to Chemical Laboratory Technology</strong></td>
<td>3</td>
<td>36.00 hours lecture. Degree Appropriate 54.00 hours lab. Prerequisite: CHEM 10 or one year of high school chemistry (C or better). A survey of chemical laboratory professional and ethical responsibilities, aspects of environmental health and safety, safe handling of chemicals, data collection, data presentation, and strategies for quality improvement. Group projects and case studies will be used to illustrate specific aspects of the course. May include field trips.</td>
</tr>
<tr>
<td><strong>CHMT 5 — Elementary Principles of Chemical Processing</strong></td>
<td>2</td>
<td>36.00 hours lecture. Degree Appropriate, CSU Prerequisite: CHEM 50 Fundamental theories of industrial chemical processing. Includes mass transfer, heat transfer, real time instrument measurement, water treatment, materials of construction and corrosion, separation by solubility, distillation, mixing systems and chemical reactions.</td>
</tr>
<tr>
<td><strong>CHMT 8 — Work Experience in Chemical Technology</strong></td>
<td>1</td>
<td>(May be taken four times for credit.) Degree Appropriate 75.00 hours lab. Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog. Provides Chemistry Technology students with actual on-the-job experience in an approved work setting which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>CHMT 9 — Work Experience in Chemical Technology</strong></td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate 150.00 hours lab. Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog. Provides Chemistry Technology students with actual on-the-job experience in an approved work setting which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>

### CHEMICAL TECHNOLOGY

Cluster repeatability:
Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values. Cluster: CHMT 8, CHMT 9
## COURSE DESCRIPTIONS

### CHEMISTRY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 50 — General Chemistry I</td>
<td>5 Units</td>
<td>54.00 lecture, 54.00 lab</td>
<td>Degree Appropriate, CSU, UC</td>
<td>108.00 hours lab.</td>
</tr>
</tbody>
</table>

Prerequisite: CHEM 51 and CHEM 50. The laboratory emphasis will be the application of the laws, theories and principles presented in CHEM 50 to a variety of chemical systems. Topics include kinetics, equilibrium, thermodynamics, acid-base and oxidation-reduction reactions, transition metals, electrochemistry and nuclear chemistry. Emphasis is on critical thinking and mathematical problem-solving using dimensional analysis. Hands-on laboratory experiments use computer and calculator-based technologies in data acquisition and analysis. 

<table>
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<th>Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 51 — General Chemistry II</td>
<td>5 Units</td>
<td>54.00 lecture, 54.00 lab</td>
<td>Degree Appropriate, CSU, UC</td>
<td>108.00 hours lab.</td>
</tr>
</tbody>
</table>

Prerequisite: CHEM 51 and CHEM 50. The laboratory emphasis will be the application of the laws, theories and principles presented in CHEM 50 to a variety of chemical systems. Topics include kinetics, equilibrium, thermodynamics, acid-base and oxidation-reduction reactions, transition metals, electrochemistry and nuclear chemistry. Emphasis is on critical thinking and mathematical problem-solving using dimensional analysis. Hands-on laboratory experiments use computer and calculator-based technologies in data acquisition and analysis.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>CHEM 80 — Organic Chemistry</td>
<td>5 Units</td>
<td>54.00 lecture, 108.00 lab</td>
<td>Degree Appropriate, CSU, UC</td>
<td>108.00 hours lab.</td>
</tr>
</tbody>
</table>

Prerequisite: CHEM 51. Designed for chemistry, biochemistry, chemical engineering and biology majors; also for those in pre-professional programs such as medicine, veterinary medicine, dentistry, optometry and pharmacy. Structure/reactivity relationships, energetics, reactions, reaction mechanisms, synthesis, separation, characterization and spectrometric methods. Structure, synthesis and representative reactions of carbohydrates, lipids and proteins.

### CHILD DEVELOPMENT

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 1 — Child, Family, School and Community</td>
<td>3 Units</td>
<td>54.00 lecture</td>
<td>Degree Appropriate, CSU, UC</td>
<td>36.00 lecture</td>
</tr>
</tbody>
</table>

Prerequisite: Eligibility for ENGL 58.

Child development is presented as the interaction and collaboration between children, parents, family, school and community. Studies of family systems in contemporary society as they impact children and their individual heritage, diverse culture, ability and language. Explores the value of communication, the development of child advocacy skills and the ability to use community resources to empower families and children.
examining developmentally appropriate practices, including the
Reviews philosophies of educating young children and learning, while
philosophies and emphasis, methods of guidance and discipline,
Overview of early child development programs, their histories,
will create culturally relevant and inclusive teaching environments while
Current approaches to diversity in the early childhood setting. Students
Advisory: CHLD 1
54.00 hours lecture. Degree Appropriate
54.00 hours lecture. Degree Appropriate, CSU
Prerequisite: CHLD 5 or CHLD 10
Overview of curriculum design for early childhood programs, including
planning, implementation and evaluation of curriculum, and observing
the interaction of play and development of the whole child.
Organization of materials, curriculum areas, and resources are explored.

CHLD 10 — Child Growth and Development
3 Units
54.00 hours lecture.
Degree Appropriate, CSU, UC
Developmental approach to the study of the child identifying forces
affecting growth processes from conception through adulthood. Meets
requirements for Title 22 and Title V Regulations pertaining to Child
Development Permit. Out-of-class observations and interviews required.
TB test required.

CHLD 10H — Child Growth and Development - Honors
3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
Developmental approach to the study of the child identifying forces
affecting growth processes from conception through adulthood. Meets
requirements for Title 22 and Title V Regulations pertaining to Child
Development Permit. Out-of-class observations and interviews required.
An honors course designed to provide an enriched experience for
accelerated students. Students may not receive credit for both CHLD 10
and CHLD 10H. TB test required.

CHLD 50 — Multicultural Education: Anti-Bias Perspective
3 Units
54.00 hours lecture. Degree Appropriate
Advisory: CHLD 1
Current approaches to diversity in the early childhood setting. Students
will create culturally relevant and inclusive teaching environments while
fostering the goals of anti-bias curriculum. An emphasis is placed on
addressing issues of bias that children and families experience on a
daily basis in our society and recognizing effective and respectful
handling of bias.

CHLD 51 — Early Literacy in Child Development
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: CHLD 61
Examines the developmental continuum of literacy from birth through
early childhood. Considerations of cultural and linguistic diversity are
applied to the study of how children become competent in all areas of
language. An appreciation of the importance of interaction and
cooperation between home and school underlies the exploration of
language and literacy acquisition. Issues of early literacy in public policy
are reviewed. TB test/observations required.

CHLD 51L — Early Literacy in Child Development Observation Laboratory
1 Unit
54.00 hours lab. Degree Appropriate, CSU
Corequisite: CHLD 51
Provides the student with an understanding of child development
through observations in the laboratory. The holistic approach to
child study is emphasized. Students synthesize information which they
have recorded and relate it to different areas of the preschool child's
growth and development.

CHLD 64 — Health, Safety and Nutrition of Young Children
3 Units
54.00 hours lecture. Degree Appropriate
Examines the relationship between a child's health status, safe learning
environments, and proper nutrition. Emphasizes the adult role in
preventative health care, legal and ethical reporting of abuse, assisting
families to access community services while supporting family practices
from diverse populations. Includes universal health precautions, evaluate
center/agency policies with licensing requirements, and food program
service with guidelines for food handling.

CHLD 66 — Early Childhood Development Observation Laboratory
2 Units
36.00 hours lecture. Degree Appropriate, CSU
Corequisite: CHLD 5 and CHLD 10 or CHLD 10H
Corequisite: CHLD 66L (May have been taken previously)
Examines the developmental continuum of literacy from birth through
early childhood. Considerations of cultural and linguistic diversity are
applied to the study of how children become competent in all areas of
language. An appreciation of the importance of interaction and
cooperation between home and school underlies the exploration of
language and literacy acquisition. Issues of early literacy in public policy
are reviewed. TB test/observations required.

CHLD 66L — Early Childhood Development Observation Laboratory
1 Unit
54.00 hours lab. Degree Appropriate, CSU
Corequisite: CHLD 66
Provides the student with an understanding of child development
through observations in the laboratory. The holistic approach to
child study is emphasized. Students synthesize information which they
have recorded and relate it to different areas of the preschool child's
growth and development.

CHLD 67 — Early Childhood Development Participation
2 Units
36.00 hours lecture. Degree Appropriate, CSU
Corequisite: CHLD 6 and CHLD 66
Corequisite: CHLD 67L
Application of knowledge of child development principles in the
preschool children's classroom setting and recognition of skills necessary
for the teacher of young children. Evaluation of participation
experiences.

CHLD 67L — Early Childhood Development Participation Laboratory
1 Unit
63.00 hours lab. Degree Appropriate, CSU
Corequisite: CHLD 67
Applying knowledge of child development principles in the
preschool children's classroom setting and recognition of skills necessary
for the teacher of young children. Evaluation of participation
experiences.

CHLD 68 — Children With Special Needs
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Corequisite: CHLD 10 or CHLD 10H
Characteristics of the needs of typically and atypically developing children
in areas of cognitive, physical, neurological, emotional and social
development. Identifies legal requirements, current issues, community
resources and the IEP/IFSP process. Emphasizes modifications, adaptations,
accommodations and teaching techniques involved in the inclusive
classroom. Required observations in community agencies.

CHLD 69 — Early Childhood Development Field Work Seminar
2 Units
36.00 hours lecture. Degree Appropriate, CSU
Corequisite: CHLD 67, CHLD 67L
Corequisite: CHLD 91
Selected topics pertinent to problems of students placed in community
sites. Topics include philosophical orientation, curriculum, parent
involvement, staff relations, professionalism and professional growth,
and will involve study, discussion and research.

CHLD 71A — Administration of Child Development Programs
3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: CHLD 1, CHLD 5, CHLD 6, CHLD 10 or CHLD 10H, or experience as
an Administrator of a Children's Program
History of the education of children in context of their care and
development, laws governing children's programs in California, and
goals of childhood development. The administrator's job description,
program budget, personnel selection and standards, records and reports,
and staff policies are included.
## Course Descriptions

### CHLD 71B — Management/Marketing/Personnel for ECD Programs
- **3 Units**
- **54.00 hours lecture**
- Degree Appropriate
- **Prerequisite:** CHLD 71A
- Strategic planning for ECD programs, including financial administration, budgeting and marketing. Investigates basic financial/data management programs; examines personnel management practices designed to facilitate director/administrator/staff relationships; and explores staff development strategies and techniques employed in creative teaching methods.

### CHLD 72 — Teacher, Parent, and Child Relationships
- **3 Units**
- **54.00 hours lecture**
- Degree Appropriate
- Comprehensive examination of child/parent/teacher relationships to better understand family dynamics and to recognize influences in the child development setting. Theories of sequential changes in parent/child/school relations within the large social context. Strategies dealing with issues that emerge when working with children and their families in the school setting.

### CHLD 73 — Infant/Toddler Care and Development
- **3 Units**
- **54.00 hours lecture**
- Degree Appropriate
- Caregivers and parents learn developmentally appropriate practices for infants and toddlers applicable to families and group care, environmental planning, and developing relationships between diverse families and staff. Student assignments involve up to ten hours of observations and participation with infants and toddlers outside of class time.

### CHLD 74 — Program Planning for the School Age Child
- **3 Units**
- **54.00 hours lecture**
- Degree Appropriate
- **Advisory:** CHLD 10 or CHLD 10H
- Integrates principles of child development related to working with the school-age child. Program planning and legal requirements for school-age programs are emphasized. Explores age-appropriate discipline and conflict resolution. Develops activity planning consistent with school-age content standards. Student assignments will include observations of school-age programs.

### CHLD 75 — Supervising Adults in Early Childhood Settings
- **2 Units**
- **36.00 hours lecture**
- Degree Appropriate
- **Advisory:** CHLD 1 and CHLD 5
- Methods and principles of working with and supervising adults in the early childhood setting. Emphasis is on the role of the experienced children’s teacher who functions as a model and mentor to new teachers as s/he addresses the needs of children, parents and staff.

### CHLD 81 — Current Curriculum Models in Child Development
- **1 Unit**
- **18.00 hours lecture**
- Degree Appropriate
- (May be taken two times for credit.)
- **Prerequisite:** CHLD 64 and CHLD 73
- Provides students with working knowledge of specific curriculum models appropriate for child development programs. Origins, classroom practices, pros, cons, and evaluation methods discussed. Curriculum model will change with course offering.

### CHLD 82 — Advocacy in Child Development
- **1 Unit**
- **18.00 hours lecture**
- Degree Appropriate
- (May be taken two times for credit.)
- **Prerequisite:** CHLD 64 and CHLD 73
- Investigates current issues in Child Development; explores process of advocacy on behalf of children.

### CHLD 83 — Current Issues in Child Development
- **1 Unit**
- **18.00 hours lecture**
- Degree Appropriate
- (May be taken for option of letter grade or Credit/No Credit.)
- **Advisory:** CHLD 5 or CHLD 10 or CHLD 10H
- Problem solving approach to guidance and discipline of children in child development settings. Investigation of appropriate developmental and attitudinal aspects of producing a respectful environment between children, caregivers and parents.

### CHLD 84 — Guidance and Discipline in Child Development Settings
- **1 Unit**
- **18.00 hours lecture**
- Degree Appropriate
- **Advisory:** CHLD 5
- Problem solving approach to guidance and discipline of children in child development settings. Investigation of appropriate developmental and attitudinal aspects of producing a respectful environment between children, caregivers and parents.

### CHLD 85 — Infants At Risk
- **3 Units**
- **54.00 hours lecture**
- Degree Appropriate
- (May be taken four times for credit.)
- **Prerequisite:** CHLD 64 and CHLD 73
- Provides students with working knowledge of current research in child development and helps them apply that research to their programs and teaching. Issues covered will change with course offerings. Students who repeat this course will improve skills through further instruction and practice.

### CHIN 1 — Elementary Chinese
- **4 Units**
- **72.00 hours lecture**
- Degree Appropriate, CSU, UC
- (CAN CHIN 1)
- Prerequisite: CHIN 1 or two years of high school Chinese or equivalent
- Further develops conversational, reading, and writing skills in Mandarin Chinese with special emphasis on verbs, grammar, and extension of vocabulary.

### CHIN 2 — Continuing Elementary Chinese
- **4 Units**
- **72.00 hours lecture**
- Degree Appropriate, CSU, UC
- (CAN CHIN 2)
- Prerequisite: CHIN 1 or two years of high school Chinese or equivalent
- Further development of Mandarin Chinese language skills and their use as tools in exploring Chinese civilization. Further study and review of grammar, exercises in word building, derivation, and the extension of the active and recognition vocabularies.

### CHIN 3 — Intermediate Chinese
- **4 Units**
- **72.00 hours lecture**
- Degree Appropriate, CSU, UC
- (CAN CHIN 8)
- Prerequisite: CHIN 2 or equivalent
- Enables students to use Mandarin in traveling, telling stories, describing experiences and discussing Chinese literary works, festivals and food.

### CHIL 92 — Family Child Care
- **3 Units**
- **54.00 hours lecture**
- Degree Appropriate
- **Advisory:** CHLD 1, 5, 6 and 10
- An overall view of home-based early education programs which includes standards of quality for the field of family child care in relationships, environments, activities, developmental learning goals, safety/health, professional and business practices.
### COURSE DESCRIPTIONS

<table>
<thead>
<tr>
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<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 35</td>
<td>Chinese Language Laboratory</td>
<td>.5 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU 27.00 hours lab. Prerequisite: Concurrent or previous enrollment in Chinese. An independent study course for students who wish to improve their skills in Mandarin Chinese. May supplement another Chinese course. Requires 24 hours in the language laboratory to receive credit. Students who repeat this course will improve skills through further practice and drill.</td>
</tr>
<tr>
<td>CNET 50</td>
<td>PC Servicing</td>
<td>4 Units</td>
<td>54.00 hours lecture. Degree Appropriate 54.00 hours lab. Advisory: ELEC S06 taken prior or concurrently PC and peripheral servicing techniques, preventative maintenance, hardware configurations, software configurations, software diagnostics, and the use of test equipment.</td>
</tr>
<tr>
<td>CNET 52</td>
<td>PC Operating Systems</td>
<td>4 Units</td>
<td>54.00 hours lecture. Degree Appropriate 54.00 hours lab. Advisory: CNET 50 taken prior Current operating systems required for A+ and Network+ Certification and general computer servicing. Topics include: identification of major components, installation, configuration, upgrading and troubleshooting.</td>
</tr>
<tr>
<td>CNET 54</td>
<td>PC Troubleshooting</td>
<td>4 Units</td>
<td>54.00 hours lecture. Degree Appropriate 54.00 hours lab. Advisory: CNET 50 taken prior Advanced microcomputer servicing. Includes: isolating, identifying, and repairing specific problems in the computer environment at the hardware level. Prepares students for the A+ Certification Exam.</td>
</tr>
<tr>
<td>CNET 56</td>
<td>Computer Networks</td>
<td>4 Units</td>
<td>54.00 hours lecture. Degree Appropriate 54.00 hours lab. Advisory: CNET 54 taken prior Standards, terminology, design, implementation and troubleshooting techniques as they relate to both Local and Wide Area Networks. Emphasis on hardware and software components, network architecture and data transmission methods. Of special interest to computer and network technicians and those seeking certification in A+, Network+, or other NSCE certifications.</td>
</tr>
<tr>
<td>CNET 60</td>
<td>A+ Certification Preparation</td>
<td>3 Units</td>
<td>(May be taken two times for credit.) Degree Appropriate 54.00 hours lecture. Advisory: CNET 54 Prepares the student and qualified computer technician for the A+ certification examination. All aspects of the Core and OS test modules will be stressed through both lecture review and test simulation software.</td>
</tr>
<tr>
<td>CNET 62</td>
<td>Network+ Certification Preparation</td>
<td>3 Units</td>
<td>(May be taken two times for credit.) Degree Appropriate 54.00 hours lecture. Advisory: CNET 56 Prepares the student and/or A+ certified technician for the Network+ Certification Examination. Individuals preparing for a job in the computer networking field or who wish to become Network+ certified will find this course invaluable.</td>
</tr>
<tr>
<td>CNET 64</td>
<td>Server+ Certification Preparation</td>
<td>3 Units</td>
<td>(May be taken two times for credit.) Degree Appropriate 36.00 hours lecture. 54.00 hours lab. Advisory: CNET 56 taken prior Prepares the computer/network service technician for the CompTIA Server+ certification examination.</td>
</tr>
<tr>
<td>CNET 66</td>
<td>Security + Certification Preparation</td>
<td>3 Units</td>
<td>(May be taken two times for credit.) Degree Appropriate 36.00 hours lecture. 54.00 hours lab. Advisory: CNET 56 taken prior Prepares the computer/network service technician for the CompTIA sponsored Security+ Certification examination. Security information is covered only as it pertains to enabling the service technician to troubleshoot a computer system that may have a security problem.</td>
</tr>
<tr>
<td>COMP 1</td>
<td>Computer Keyboarding</td>
<td>4 Units</td>
<td>54.00 hours lecture. Degree Appropriate, CSU 54.00 hours lab. Develops basic alpha/numeric keyboarding skills on a personal computer; develops a straight-copy rate of 25 to 30 gross words a minute with a predetermined error limit; includes keyboarding of letters, tables and manuscripts.</td>
</tr>
<tr>
<td>COMP 1A</td>
<td>Computer Keyboarding</td>
<td>2 Units</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU 27.00 hours lecture. 27.00 hours lab. Develops basic alpha/numeric keyboarding with skills on a personal computer; develops a straight-copy rate of 25 to 40 gross words a minute with a predetermined error limit; includes keyboarding of letters, tables and manuscripts.</td>
</tr>
<tr>
<td>COMP 1B</td>
<td>Computer Keyboarding</td>
<td>2 Units</td>
<td>27.00 hours lecture. Degree Appropriate, CSU 27.00 hours lab. Advisory: COMP 1A or BUSO 1A, or ability to type 20 wpm with test verification at first class meeting Develops a straight-copy rate of 25 to 40 gross words a minute with a predetermined error limit and includes keyboarding of letters, tables, and manuscripts.</td>
</tr>
<tr>
<td>COMP 2</td>
<td>Intermediate Computer Keyboarding</td>
<td>4 Units</td>
<td>54.00 hours lecture. Degree Appropriate 54.00 hours lab. Prerequisite: COMP 1 or COMP 1B or BUSO 1 or BUSO 1B, or one year of high school keyboarding Develops computer keyboarding speed and accuracy with a proficiency standard upon completion of 35-55 gross words a minute with a predetermined error limit. Using word processing software, extensive instruction given for formatting of letters, memos, reports, tables and other related business documents.</td>
</tr>
<tr>
<td>COMP 10</td>
<td>Operating the Macintosh Computer</td>
<td>1.5 Units</td>
<td>27.00 hours lecture. Basic skills and in-depth practice operating the Apple Macintosh computer. Includes introduction to the operating system, paint, draw, word-processing, database, spreadsheet, and multi-media applications.</td>
</tr>
<tr>
<td>COMP 11</td>
<td>Internet Research for Business</td>
<td>2 Units</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU 27.00 hours lecture. 27.00 hours lab. Advisory: COMP 10 or CSB 13 Practical hands-on instruction using the Internet for research in a business environment. Master Internet-specific research techniques, discover timesaving tips for locating and managing information, and use the entire Internet, newsgroups, FTP (File Transfer Protocol) and mailing lists.</td>
</tr>
<tr>
<td>COMP 12</td>
<td>Office Computer Applications</td>
<td>4 Units</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU, UC 54.00 hours lecture. 54.00 hours lab. In depth study of computer applications utilized in the office environment. Includes extensive hands-on instruction in word processing, spreadsheet, data management, and business graphics. Intended for the student who needs to upgrade or acquire office computer skills.</td>
</tr>
<tr>
<td>COMP 13</td>
<td>Using Web Page Software</td>
<td>4 Units</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU 54.00 hours lecture. 54.00 hours lab. Advisory: COMP 10 or COMP 12 or CSB 13 or CSB 15 Using industry leading Web page authoring software to plan, develop, and publish effective professional Web sites. Includes working with text and graphics; creating hyperlinks; creating tables and layers; collecting data with forms; adding multimedia objects; creating and applying cascading style sheets; creating interactions and behaviors; publishing a Web site.</td>
</tr>
</tbody>
</table>
Course Descriptions

COMP 18 — Data Entry 3 Units
(May be taken two times for credit.) Degree Appropriate
54.00 hours lecture.
Advisory: Ability to type 25 wpm with test verification at first class meeting.
Data entry using a microcomputer. Includes intensive skill building on the ten-key pad and development of keyboarding skills for entering formatted and non-formatted text, both alphabetic and numeric, in a variety of business applications. Students who repeat this course will improve skills through further instruction and practice.

COMP 20 — Word for the Business Professional 4 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 54.00 hours lecture.
54.00 hours lab.
Advisory: COMP 10 or CISB 13 and ability to type 25 wpm with test verification at first class meeting.
Extensive hands-on instruction using Microsoft Word and its editing, formatting, and language tools to create, revise and format various business and report documents. Also creates flyers, newsletters, and other publication documents using advanced formatting techniques and tools. Students who repeat this course will improve skills through further instruction and practice.

COMP 28 — Office Management Skills 3 Units
(May be taken two times for credit.) Degree Appropriate
Advisory: COMP 1 or COMP 1A, or BUSO 1 or BUSO 1A, and BUSO 5
54.00 hours lecture.
54.00 hours lab.
Advisory: COMP 10 or CISB 13 and ability to type 25 wpm with test verification at first class meeting.
Advanced training in Photoshop editing, color, exposure, sharpness, and other special effects for producing newspapers, newsletters, and other publications. This course is open to students who have taken any introductory Photoshop course and want to advance their skills. Students who repeat this course will improve skills through further instruction and practice.

COMP 60 — Business Publications Using Desktop Publishing Software 4 Units
(May be taken three times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.) 54.00 hours lecture.
54.00 hours lab.
Advisory: COMP 10 or COMP 12 or CISB 13 or CISB 15
Using desktop publishing software, integrate text and graphics to design, edit, and produce high-quality business publications.

COMP 68 — Transcription Techniques 3 Units
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate
54.00 hours lecture.
Develops the language competencies and formatting knowledge required to produce acceptable business documents; emphasizes punctuation, number usage, proofreading, spelling, and word division; and reinforces through a series of sentence applications, paragraphs and business documents.

COMP 150 — Basic PowerPoint 1 Unit
(May be taken for Credit/No Credit only.) Degree Appropriate
18.00 hours lecture.
Overview and basic instruction using one of the most popular presentation software packages. Recommended for all students who need to know how to create presentations. Not recommended for Office Technology majors.

COMP 600 — Business Publications 4 Units
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate
54.00 hours lecture.
54.00 hours lab.
Advisory: COMP 1 or COMP 1A, or BUSO 1 or BUSO 1A
Using desktop publishing software, integrate text and graphics to design, edit, and produce high-quality business publications.

GRAP 1 — Computer Graphics Lab 1 Unit
(May be taken two times for credit.) Degree Appropriate
Advisory: COMP 10 or equivalent computer experience
54.00 hours lab.
54.00 hours lecture.
Advisory: COMP 10 or equivalent computer experience
Provides computer laboratory experience to supplement the regular program, and provides opportunities for students to pursue more advanced projects. Students who repeat this course will improve skills through further instruction and practice.

GRAP 10 — Photo Editing with Photoshop 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
36.00 hours lab.
Advisory: COMP 10 or PHOTO 4
Basic techniques to adjust and modify photos using Photoshop software tools. Includes digital color theory and photo quality standards; practice print reproduction, resolution and scaling, masking, layer editing and effects, filters, color correction and file formats; output for editing, restoring, and retouching. Students who repeat this course will improve skills through further instruction and practice.

GRAP 12 — Advanced Photo Editing with Photoshop 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
54.00 hours lab.
Prerequisite: GRAP 10
Advanced training in Photoshop editing, color, exposure, sharpness, and contrast enhancement, layer and object masking, vector tools, image compositing, and the uses of blended modes; design of realistic and imaginary photo illustrations using 8- and 16-bit high resolution digital images. Students who repeat this course will improve skills through further instruction and practice.

GRAP 20 — Applying Photos and Images in Multimedia 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
54.00 hours lab.
Advisory: GRAP 10
Principles of digital storytelling, combining still photos, graphics images, type, video, and audio content output to digital CD or DVD media, video, or web pages. Commonly used tools and techniques of Apple iPhoto, iMovie, iDVD, iTunes, GarageBand, and QuickTime Pro multimedia software, Mac OS X features, and other multimedia software and hardware. Students who repeat this course will improve skills through further instruction and practice.

GRAP 14 — Digital Color Management 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
54.00 hours lab.
Prerequisite: GRAP 10
Advanced techniques of digital photo color management systems and workflow. System color architectures, monitors, printers, profilers, and other digital devices; spectrophotometer techniques; scripting Photoshop actions, using “digital raw” meta data to organize photo storage; advanced special editing techniques for 16-bit raw color and grayscale images. Students who repeat this course will improve skills through further instruction and practice.

GRAP 16 — Digital Image Design with Illustrator & Freehand 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
54.00 hours lab.
Advisory: COMP 10 or equivalent computer experience
Basic digital image drawing techniques using Adobe Illustrator or Macromedia Freehand. Includes software tools, applying color, using layers, typography, measurement, and paper systems. Practice importing photo scans, creating layouts, layer animation, choosing fonts, special effects, export file formats, and output in a digital workflow. Students who repeat this course will improve skills through further instruction and practice.

GRAP 18 — Advanced Image Design - 3D Modeling Techniques 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
54.00 hours lab.
Prerequisite: GRAP 16
Corequisite: GRAP 1
Advanced digital image drawing emphasizing creation of photorealistic 3D models and environments. Principles of perspective, coordinate space, photographic lighting, object animation, photo and video texture mapping, and common techniques for rendering still or animated QuickTime image movies for digital compositing and post-production. Students who repeat this course will improve skills through further instruction and practice.

GRAP 24 — Digital Video Production 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
54.00 hours lab.
Advisory: COMP 10
Principles of digital video production: editing, color grading, creative sound editing, and mastering techniques. Students who repeat this course will improve skills through further instruction and practice.

GRAP 28 — Motion Graphics 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
54.00 hours lab.
Advisory: COMP 10
Principles of motion graphics: basic techniques of animation, special effects, and digital video editing. Students who repeat this course will improve skills through further instruction and practice.

GRAP 17 — Interactive Design I 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
54.00 hours lab.
Prerequisite: GRAP 10
Interactive design for the Web and kiosk applications. Students who repeat this course will improve skills through further instruction and practice.

GRAP 26 — Visual Communication 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture.
54.00 hours lab.
Advisory: COMP 10
Principles of visual communication design and production. Students who repeat this course will improve skills through further instruction and practice.
GRAF 24 — Work Experience in Computer Graphics 2 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
150.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
Provides Computer Graphics students with actual on-the-job experience in an approved work setting which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.

GRAP 28 — Digital Portfolio 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
54.00 hours lab.
Prerequisite: GRAP 12 and GRAP 20
Preparation of a personal computer graphics portfolio containing key samples of work for presentation or career evaluation. The portfolio displays the learner’s skills mastery, knowledge, and capacities for communicating, synthesis, and problem solving.

GRAP 99 — Special Projects in Computer Graphics 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for Credit/No Credit only.)
36.00 hours lecture.
In order to offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have an instructor's authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to insure that proficiencies are enhanced.

Course Descriptions: Auxiliary

CISX 94 — Laboratory Studies in Computer Information Systems 1 Unit
(May be taken two times for credit.) Degree Appropriate, CSU
(May be taken for Credit/No Credit only.)
54.00 hours lab.
Prerequisite: Laboratory course in the same subject field and program specialization and depending on space availability
This course provides extended laboratory experiences supplementary to those available in the regular program and allows the student to pursue more advanced and complex laboratory projects and experiments. Students who repeat this course will increase skill proficiencies in Computer Information Systems.

CISX 95 — Laboratory Studies in Computer Information Systems 2 Units
(May be taken two times for credit.) Degree Appropriate, CSU
(May be taken for Credit/No Credit only.)
108.00 hours lab.
Prerequisite: Laboratory course in the same subject field and program specialization and depending on space availability
This course provides extended laboratory experiences supplementary to those available in the regular program and allows the student to pursue more advanced and complex laboratory projects and experiments. Students who repeat this course will increase skill proficiencies in Computer Information Systems.

CISX 96 — Laboratory Studies in Computer Information Systems 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
(May be taken for Credit/No Credit only.)
162.00 hours lab.
Prerequisite: Laboratory course in the same subject field and program specialization and depending on space availability
This course provides extended laboratory experiences supplementary to those available in the regular program and allows the student to pursue more advanced and complex laboratory projects and experiments. Students who repeat this course will increase skill proficiencies in Computer Information Systems.

CISX 97 — Work Experience in Computer Information Systems 1 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
75.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
Advisory: CISD 14, CISP 14, CISM 31
Provides CIS students with actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. Work experience placement is not guaranteed but assistance is provided. Students who repeat this course will improve skills through further instruction and practice.

COMPUTER INFORMATION SYSTEMS: DATABASE

CISB 11 — Computer Information Systems 3.5 Units
(CAN BUS 6) Degree Appropriate, CSU, UC
54.00 hours lecture.
27.00 hours lab.
Provides an understanding of computer information systems: computer hardware, software, data communications, computer ethics, computer security, systems analysis and design, Internet, problem solving and programming using multiple computer platforms.

CISB 13 — Microsoft Windows 2 Units
27.00 hours lecture. Degree Appropriate, CSU
27.00 hours lab.

CISB 15 — Microcomputer Applications 4 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Introduction of windows based operating system and applications. Simple business examples using up-to-date browser, word processing, spreadsheet, database management and presentation software; and integration of software applications. Hands-on instruction on windows based computers.

CISB 21 — Microsoft Excel 4 Units
54.00 hours lecture. Degree Appropriate
54.00 hours lab.
Spreadsheet concepts using Microsoft Excel including formatting formula and function use, charting, linking worksheets, pivot tables, macros, and VBA code basics.

COMPUTER INFORMATION SYSTEMS: BEGINNING

CISD 11 — Database Management - Microcomputers 4 Units
54.00 hours lecture. Degree Appropriate, CSU
54.00 hours lab.
Advisory: COMP 12 or CISB 11 and CISB 15
Design, creation and management of relational databases using Microsoft’s Access or similar DBMS. Basic database design, creation of tables, queries, forms, reports, data access pages, and macros. Creation of Custom Graphical User Interface using Switchboard Manager and VBC code. Extensive hands-on experience on a Windows-based PC.

CISD 14 — Advanced Database Management - Microcomputers 4 Units
54.00 hours lecture. Degree Appropriate
54.00 hours lab.
Advisory: CISD 11 and CISB 11
Advanced Access programming techniques using Visual Basic language; event-driven programming; access object model, DAO object model, ADO object model; VB structures, arrays, error handling, multi-user applications, transaction processing, client-server; security issues. Extensive hands-on experience on a windows-based PC.
### Course Descriptions

**CISD 21 — SQL Server**  
4 Units  
54.00 hours lecture. Degree Appropriate  
4.00 hours lab.  
Advisory: CISB 11 or CISB 15  
Provides comprehensive instruction in structured query language (SQL) and transact-SQL for Microsoft SQL Server users. Students design a database, create database objects, view and update data, define cursors, develop program units, manage transactions, and handle database security.

**CISD 31 — Database Management**  
4 Units  
54.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Advisory: CIS 11  
Oracle database functions, concepts, and terms. PL/SQL will be used to code, test and implement stored procedures, functions, triggers, and packages. Relational database projects will be built using PL/SQL.

**CISD 32 — Oracle Forms and Reports**  
4 Units  
54.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Advisory: CISD 31  
Design, creation and implementation of interactive single forms with multiple canvases, multiple forms and reports using PL/SQL triggers, the Object Navigator, and Form and Report Builders. Business reports and interactive forms are created using single and multiple tables.

**CISD 33 — Oracle Database Architecture and Administration**  
4 Units  
54.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Advisory: CISD 31 highly recommended  
Provides the Oracle data base administrator (DBA) a firm foundation in basic administrative tasks and the necessary knowledge and skills to set up, maintain, and troubleshoot an Oracle database. Presents an in-depth coverage on Oracle internal structures, the database administrative tools, user management, management of database logical and physical layouts.

**CISD 34 — High Performance Oracle SQL Tuning**  
2 Units  
27.00 hours lecture. Degree Appropriate  
27.00 hours lab.  
Advisory: CISD 33  
Provides Oracle Data Base Administration and Oracle Application Developers with the knowledge and hands-on skills necessary to tune the performance of Oracle applications. Concepts and hands-on programming skills necessary to code efficient SQL statements, use Oracle Optimizer, resources, and path tracing.

**CISD 40 — Database Design**  
2 Units  
27.00 hours lecture. Degree Appropriate  
27.00 hours lab.  
Advisory: CISD 31  
Database design principles. Understanding database needs and functions, creating data models, E-R and UML diagrams, using normalization rules and principles to create properly-designed databases and learning basic database administrator objectives and tasks.

**CISD 50 — Web Based Applications With PL/SQL**  
4 Units  
54.00 hours lecture. Degree Appropriate, CSU  
54.00 hours lab.  
Advisory: CISD 31  
Development of web based applications with PL/SQL. Includes general understanding of web DB, incorporating Oracle database into PL/SQL web applications and building objects and components.

### COMPUTER INFORMATION SYSTEMS: MANAGEMENT

**CISM 11 — Systems Analysis and Design**  
3.5 Units  
27.00 hours lecture. Degree Appropriate, CSU, UC  
27.00 hours lab.  
Advisory: CIS 15 or COMP 12 and CISB 11  
Develops basic understanding of information systems and the discipline of systems analysis in relation to the system development life cycle. Develops skills in applying the tools, techniques, and concepts of systems analysis to information systems development, Application of structured analysis and design methods and tools, including CASE tools.

**CISM 14 — Computer Information Systems Seminar**  
4 Units  
Spring Semester Degree Appropriate  
May be taken two times for credit.  
54.00 hours lecture.  
54.00 hours lab.  
Advisory: CISM 11 and at least one of the following: CISD 14, CISP 14, CISP 34  
Guided experience in the performance, management and documentation of a computer-based system project. The student, independently or as a team member, will initiate and complete a semester project. Includes defining the problem, designing the new system, developing a working system and preparing the system documentation. The project must be completed in a programming language for which an advanced course has been completed. Students who repeat this course will improve skills through further instruction and practice.

**CISM 21 — Client/Server Architecture**  
4 Units  
54.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Advisory: CISD 31 or CISP 14 or CISP 41  
Architectural framework and components of a client/server environment. Includes standards groups, data access and distribution, application development, systems and network management, implementation issues; selection criteria for client hardware and software, server hardware and software, relational databases, applications development tools, and distributed systems management; and application prototyping.

**CISM 23 — AS/400 System Administration**  
4 Units  
54.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Advisory: CISD 31 or computer work experience  
Administrating the IBM AS/400 Computer System using OS/400 (operating system/400) services: OS/400 user interface, CL command interface, navigating system hardware features and licensed programs, managing devices, system IPL, system security, objects and object management, libraries and library lists, AS/400 job scheduling and job descriptions, work management objects, objects, save and restore functions, AS/400 utilities, SSA menu creation, DDS-described physical, logical and display files, and basic interactive and batch CL programs.

### COMPUTER INFORMATION SYSTEMS: NETWORKING

**CISM 11 — Telecommunications/Networking**  
4 Units  
54.00 hours lecture. Degree Appropriate, CSU  
54.00 hours lab.  
Advisory: CISB 11 or CISB 15  
NASCOR core. Prepare for Cisco CCNA 1st year certification. Covers fundamental concepts and design in telecommunications/networking including: network standards, TCP/IP, OSI, network protocols, transmission media, hardware architecture, local area network, wide area network, remote connectivity, Network operating systems (Microsoft Windows, Novell NetWare, and UNIX), troubleshooting, maintaining/upgrading network, network security, vulnerability, and intrusion detection.

**CISM 14 — Advanced Telecommunications**  
4 Units  
54.00 hours lecture. Degree Appropriate  
54.00 hours lab.  
Advisory: CISM 11, CISM 11, CISM 41  
Concepts of advanced telecommunication and network analysis. Topics including: review of networking and telecommunications protocols; advanced TCP/IP subnet and OSI Model applications; use of protocol analysis tool to capture data frame and troubleshoot advanced network problems through the decode analysis of the captured data frame; design and analysis of LAN, WAN, and Wireless networks in various environments and appraisal of network security; vulnerability and intrusion detection.
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Advisory Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISN 21 — Windows Operating System</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>CISN 22 — Linux Operating System</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>CISN 24 — Window Server Network &amp; Security Administration</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>CISN 31 — Linux Operating System</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>CISN 34 — LINUX Networking and Security</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>CISN 41 — Novell/SUSE Linux Enterprise Server Administration</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>CISN 51 — Cisco CCNA Networking and Routing</td>
<td>4</td>
<td>54.00</td>
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<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>CISP 11 — Programming in Visual Basic</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>CISP 14 — Advanced Basic Programming</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>CISP 21 — Programming in Java</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>CISP 24 — Advanced Java Programming</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>CISP 31 — Programming in C++</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>CISP 34 — Advanced C++ Programming</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>CISP 31 — Programming in C#</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>CISP 34 — Advanced Programming in C#</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>CISP 41 — Programming in C#</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
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<tr>
<td>CISP 44 — Advanced Programming in C#</td>
<td>4</td>
<td>54.00</td>
<td>54.00</td>
<td>Degree Appropriate, CSU, UC</td>
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<tr>
<td>CISP 51 — Principles of Object-Oriented Design</td>
<td>2</td>
<td>27.00</td>
<td>27.00</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
</tbody>
</table>

Course Descriptions

- **CISN 21 — Windows Operating System**: 4 Units
  - 54.00 hours lecture.
  - Degree Appropriate, CSU
  - 54.00 hours lab.
  - Advisory: CISB 11 or CISB 15 OR COMP 12
  - Employing a Windows operating system to manage disks, files and applications. Creating and editing documents with WordPad and Paint applications, analyze and debug Windows operating environment problems, secure a Windows environment, conduct research on the Internet.

- **CISN 24 — Window Server Network & Security Administration**: 4 Units
  - 54.00 hours lecture.
  - Degree Appropriate, CSU
  - 54.00 hours lab.
  - Advisory: CISB 15 or CISB 11 or CISN 11 OR CISN 21
  - Active directory security and policy management, server/client installation, DHCP (Dynamic Host Configuration Protocol), DNS (Domain Name Service), file system security, logon script, network printing, web and terminal server, NAT, IPsec and secure VPN.

- **CISN 31 — Linux Operating System**: 4 Units
  - 54.00 hours lecture.
  - Degree Appropriate, CSU
  - 54.00 hours lab.
  - Advisory: CISB 11
  - Concepts and skills in planning and installing Linux Operating System and its graphical interface; using Linux Shells and system administration commands; managing user accounts; installing hardware and software; creating scripts to automate system administration; and maintaining file systems and system resources.

- **CISN 34 — LINUX Networking and Security**: 4 Units
  - 54.00 hours lecture.
  - Degree Appropriate, CSU
  - 54.00 hours lab.
  - Advisory: CISB 11 or CISB 15
  - Network installation and management using Linux operating system and its security components. In-depth study of concepts TCP/IP, IP addressing, network protocols and servers, gateways, routers, bridges and applications. Creating Linux intranets and connecting to Internet.

- **CISN 41 — Novell/SUSE Linux Enterprise Server Administration**: 4 Units
  - 54.00 hours lecture.
  - Degree Appropriate, CSU
  - 54.00 hours lab.
  - Advisory: CISB 15, CISN 11, OR CISN 21
  - Novell, Microsoft Windows, and Linux server network integrations. NDS (Novell Directory Services), server and client installation, shared resources, NDS and file system security, login script, network printing and management, ZEN (Zero Effort Network), IP subnet.

- **CISP 11 — Programming in Visual Basic**: 4 Units
  - 54.00 hours lecture.
  - Degree Appropriate, CSU, UC
  - 54.00 hours lab.
  - Advisory: CISB 11 OR CISB 15 or computer work experience
  - Programming using Visual Basic. Planning and writing object-oriented applications using Windows Forms and Web forms; user interface design classes, objects, properties, methods and events; control structures; lists and arrays; printing and Print Previews; accessing a database.

- **CISP 14 — Advanced Basic Programming**: 4 Units
  - 54.00 hours lecture.
  - Degree Appropriate, CSU, UC
  - 54.00 hours lab.
  - Advisory: CISB 11
  - Advanced computer programming concepts using Visual Basic as the programming language. Designing, coding, testing, and implementing event-driven programs; creating and updating sequential and random files; validating input data; trapping errors; designing, displaying, searching, and updating database tables; creating recordsets using SQL, producing business graphics; using OLE objects and DLLs; distributing applications.

- **CISP 21 — Programming in Java**: 4 Units
  - 54.00 hours lecture.
  - Degree Appropriate, CSU, UC
  - 54.00 hours lab.
  - Advisory: CISB 11 OR CISB 15
  - Programming using Java as the programming language. Design and develop object-oriented programs and Web-based applications; documentation and debugging techniques; user-interface, objects, properties, methods, and events; elementary control structures, lists, arrays, streams and serialization. Provides students with hands-on experience.

- **CISP 24 — Advanced Java Programming**: 4 Units
  - 54.00 hours lecture.
  - Degree Appropriate, CSU, UC
  - 54.00 hours lab.
  - Advisory: CISB 21
  - Advanced object-oriented programming concepts and techniques in Java. Course is designed to teach serialization, multithreading, advanced Swing components, networking, server-side technology (servlets, RMI), JDBC, Java Beans, Security (PKI).
Course Descriptions

**COMPUTER INFORMATION SYSTEMS: SECURITY**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Degree Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 11</td>
<td>Practical Computer Security</td>
<td>2</td>
<td>27.00</td>
<td>0.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>CISS 13</td>
<td>Principles of Information Systems Security</td>
<td>4</td>
<td>54.00</td>
<td>0.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>CISS 21</td>
<td>Network Vulnerabilities and Countermeasures</td>
<td>4</td>
<td>54.00</td>
<td>0.00</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>CISS 23</td>
<td>Network Analysis, Intrusion Detection/Prevention Systems</td>
<td>4</td>
<td>54.00</td>
<td>0.00</td>
<td>Degree Appropriate, CSU</td>
</tr>
</tbody>
</table>

**CISS 23 — Network Analysis, Intrusion Detection/Prevention Systems** 4 Units
54.00 hours lecture. Degree Appropriate, CSU 54.00 hours lab.
Concepts of design and implementation of a secured network. Addresses an in-depth coverage of network security design, implementation and configuration of firewall and VPN in various environments and platforms, implementing security with Cisco routers, firewall log analysis, IPsec, SSH (Secure Shell), and secure perimeter design. Lab assignments will provide hands-on practice in installing.

**COMPUTER INFORMATION SYSTEMS: WEB APPLICATIONS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Degree Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISW 11</td>
<td>Introduction to Internet Technologies</td>
<td>4</td>
<td>54.00</td>
<td>0.00</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>CISW 21</td>
<td>Secure Client Side Web Programming</td>
<td>4</td>
<td>54.00</td>
<td>0.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>CISW 24</td>
<td>Secure Server Side Web Programming</td>
<td>4</td>
<td>54.00</td>
<td>0.00</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>CISW 31</td>
<td>Secure Web Servers</td>
<td>4</td>
<td>54.00</td>
<td>0.00</td>
<td>Degree Appropriate</td>
</tr>
</tbody>
</table>

**CISW 31 — Secure Web Servers** 4 Units
54.00 hours lecture. Degree Appropriate, CSU 54.00 hours lab.
Plan, install and manage secure Web servers like Apache or IIS using Java as well as general concepts and techniques of computer programming. Topics include: Java expressions, flow control, methods and program structure, Java classes, overloading, object references, inheritance, Java library packages, exceptions, file I/O, applets, GUI, and event handling. A course for computer science, engineering, mathematics, and other science students.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 150</td>
<td>Assembly Language/Machine Architecture</td>
<td>3</td>
<td>This course covers the basics of computer architecture and assembly language. topics include the Intel 80x86 family of processors, mapping device models, and assembly language translation processes.</td>
</tr>
<tr>
<td>CSCI 150L</td>
<td>Assembly Language Laboratory</td>
<td>1</td>
<td>An independent study program designed to complement the lecture material presented in CSCI 150. Hands-on computer work will include problem solving in linear data structures, strings, and trees.</td>
</tr>
<tr>
<td>CSCI 170</td>
<td>Introduction to Unix Operating System</td>
<td>3.5</td>
<td>This course will cover the UNIX operating system, system administration, and networking. Topics include process synchronization and communication mechanisms, system administration, and networking.</td>
</tr>
<tr>
<td>CORS 15</td>
<td>Control and Supervision of the Offender</td>
<td>3</td>
<td>This course covers the role of correctional staff and clients, including their relationships and the characteristics of both the offender and the victim.</td>
</tr>
<tr>
<td>CORS 20</td>
<td>Correctional Law</td>
<td>3</td>
<td>This course covers legal and due process rights for inmates, inmate rights vs. needs of society, and appellate court decisions.</td>
</tr>
<tr>
<td>CORS 25</td>
<td>Probation and Parole</td>
<td>3</td>
<td>This course covers historical development of probation and parole with emphasis on current California programs, including the roles of courts, parole boards, and the duties and responsibilities of the staff of probation and parole agencies.</td>
</tr>
<tr>
<td>CORS 30</td>
<td>Ethnic Relations in Corrections</td>
<td>3</td>
<td>This course covers a historical survey of minority roles, problems and relationships in America, including cultural and racial differences and interpersonal relationships of correctional staff and clients.</td>
</tr>
<tr>
<td>CORS 35</td>
<td>Interviewing and Counseling in Corrections</td>
<td>3</td>
<td>This course covers techniques of interviewing and counseling in the field of corrections with emphasis on practical application. Needs of the client and agency will be stressed.</td>
</tr>
<tr>
<td>CORS 40</td>
<td>Crime and Delinquency</td>
<td>3</td>
<td>This course covers criminal behavior and types of crime and effects on society and victims, including stressors, property crime, property offender, motivation, and methods of control used by society.</td>
</tr>
<tr>
<td>CORS 45</td>
<td>The Violent Offender</td>
<td>3</td>
<td>This course covers violent crimes of felony assault, robbery, rape, and the various types of homicide, emphasizing the characteristics of both the offender and the victim.</td>
</tr>
<tr>
<td>CSCI 220</td>
<td>Data Structures I</td>
<td>3</td>
<td>This course covers abstract data types and running time analysis tools. Linear data structures including sets, stacks, queues, and linked lists. Trees, binary search trees, heaps, and priority queues. Many procedures are discussed using an algorithmic language and selected problems are programmed in a higher level language.</td>
</tr>
<tr>
<td>CORS 10</td>
<td>Introduction to Correctional Sciences</td>
<td>3</td>
<td>This course covers the field of corrections: county jail, probation, the California Youth Authority and the Department of Corrections as a member of the Criminal Justice System. Includes philosophy, past and the present practices and the criminal justice and correctional processes.</td>
</tr>
<tr>
<td>CORS 15</td>
<td>Control and Supervision of the Offender</td>
<td>3</td>
<td>This course covers the area of controlling and supervising inmates. Emphasizes California's methods in rapidly-expanding institutions.</td>
</tr>
<tr>
<td>CORS 20</td>
<td>Correctional Law</td>
<td>3</td>
<td>This course covers the legal and due process rights for inmates, inmate rights vs. needs of society, and appellate court decisions.</td>
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<td>CORS 25</td>
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<tr>
<td>CORS 45</td>
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<td>3</td>
<td>This course covers violent crimes of felony assault, robbery, rape, and the various types of homicide, emphasizing the characteristics of both the offender and the victim.</td>
</tr>
<tr>
<td>COUN 1</td>
<td>Introduction to College</td>
<td>1</td>
<td>This course covers orientation to college life and higher education resources, explores graduation, transfer, and career options, factors in educational decision making, and educational planning. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
**Course Descriptions**

**COUN 2 — College Success Strategies** 3 Units  
Degree Appropriate, CSU, UC  
(Prerequisite: Eligibility for ENGL 68)  
May be taken for option of letter grade or Credit/No Credit.  
54.00 hours lecture.  
Assists students in evaluating their readiness for a successful college experience. Explores strategies and techniques to be an effective college student, including time management, study skills, college resources, career exploration and educational planning. Develops skills necessary to reach educational and career goals.

**COUN 5 — Career/Life Planning** 3 Units  
Degree Appropriate, CSU  
Prerequisite: Eligibility for ENGL 68  
A systematic approach to self-exploration and career/life planning which includes identification of values, interests, skills and self-management style. Develop decision-making and goal-setting skills and identify barriers to success. Explores careers and job search techniques.

**COUN 7 — Introduction to the Transfer Process** 2 Units  
Degree Appropriate, CSU  
May be taken for option of letter grade or Credit/No Credit.  
36.00 hours lecture.  
Introduction and orientation to the transfer process to a four-year institution. Includes an in-depth exploration of transfer requirements, admission procedures and requirements for majors. Also explores academic and support services, financial aid and other transitional issues to enable students to make informed choices on majors and four-year institutions in academic planning. Field trips are required.

**COUN 9A — Special Projects in Counseling** 1 Unit  
Degree Appropriate, CSU  
(Prerequisite: Eligibility for ENGL 68)  
May be taken for option of letter grade or Credit/No Credit.  
18.00 hours lecture.  
In order to offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. Students must have an instructor's authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced.

**COUN 9B — Special Projects in Counseling** 2 Units  
Degree Appropriate, CSU  
(Prerequisite: Eligibility for ENGL 68)  
May be taken for option of letter grade or Credit/No Credit.  
36.00 hours lecture.  
In order to offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. Students must have an instructor's authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced.

**COUN 54 — Single Parent Academy** 3 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
Develops personal, educational, and career/life planning skills for single parents.

**DNCE 1 — Ballet Fundamentals** 2 Units  
Degree Appropriate, CSU  
Basic vocabulary, technique and movement combinations for ballet. Students who repeat this course will improve skills through further instruction and practice.

**DNCE 2A — Ballet I** 1 Unit  
Degree Appropriate, CSU, UC  
(Prerequisite: DNCE 12A or DNCE 12B or DNCE 13 or DNCE 12A-2 or DNCE 12B-2 or DNCE 13-2)  
May be taken for option of letter grade or Credit/No Credit.  
54.00 hours activity.  
Basic vocabulary, technique and movement combinations for ballet. Students who repeat this course will improve skills through continued instruction and practice.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNCE 11A-2</td>
<td>Social Dance Forms I</td>
<td>.5 Unit</td>
<td>Designed to teach basic social dance techniques. Focus on fundamentals of music, dance positions, dance formations and choreography to be used in the study of, but not limited to Swing, Salsa, Waltz, Fox Trot and Tango. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 11B</td>
<td>Social Dance Forms II</td>
<td>1 Unit</td>
<td>Advanced social dance techniques. Focus on improving fundamentals of music, dance positions, dance formations and choreography to be used in the study of, but not limited to Swing, Salsa, Waltz, Fox Trot and Tango. Students who repeat this course will improve proficiency through continued instruction and practice.</td>
</tr>
<tr>
<td>DNCE 11B-2</td>
<td>Social Dance Forms II</td>
<td>.5 Unit</td>
<td>Designed for the experienced dancer to learn the techniques of choreography. Presents basic choreographic forms and compositional design. Students who repeat this course will improve technical and compositional skills through further practice and instruction.</td>
</tr>
<tr>
<td>DNCE 12A</td>
<td>Modern I</td>
<td>1 Unit</td>
<td>Designed for the experienced dancer to learn the techniques of modern dance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 12A-2</td>
<td>Modern I</td>
<td>.5 Unit</td>
<td>Intermediate technique and movement combinations for modern dance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 12A-2</td>
<td>Modern I</td>
<td>1 Unit</td>
<td>Basic vocabulary, technique, and movement combinations for Modern dance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 12B</td>
<td>Modern II</td>
<td>1 Unit</td>
<td>Intermediate technique and movement combinations for modern dance. Students who repeat this course will improve proficiency through continued instruction and practice.</td>
</tr>
<tr>
<td>DNCE 12B-2</td>
<td>Modern II</td>
<td>.5 Unit</td>
<td>Designed to teach basic social dance techniques. Focus on fundamentals of music, dance positions, dance formations and choreography to be used in the study of, but not limited to Swing, Salsa, Waltz, Fox Trot and Tango. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 12B-2</td>
<td>Modern II</td>
<td>1 Unit</td>
<td>Designed to teach basic social dance techniques. Focus on fundamentals of music, dance positions, dance formations and choreography to be used in the study of, but not limited to Swing, Salsa, Waltz, Fox Trot and Tango. Students who repeat this course will improve proficiency through continued instruction and practice.</td>
</tr>
<tr>
<td>DNCE 13</td>
<td>Modern Performance</td>
<td>2 Units</td>
<td>Introduces the experienced modern dance student to an overview of modern dance styles and choreography elements, enabling them to choreograph and perform. Students who repeat this course will improve proficiency through continued instruction and practice.</td>
</tr>
<tr>
<td>DNCE 13-2</td>
<td>Modern Performance</td>
<td>.5 Unit</td>
<td>Advanced social dance techniques. Focus on improving fundamentals of music, dance positions, dance formations and choreography to be used in the study of, but not limited to Swing, Salsa, Waltz, Fox Trot and Tango. Students who repeat this course will improve proficiency through continued instruction and practice.</td>
</tr>
<tr>
<td>DNCE 14A</td>
<td>Jazz I</td>
<td>1 Unit</td>
<td>Designed for the experienced dancer to learn the techniques of jazz dance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 14A-2</td>
<td>Jazz I</td>
<td>.5 Unit</td>
<td>Intermediate technique, movement combinations and routines for jazz dance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 14B</td>
<td>Jazz II</td>
<td>1 Unit</td>
<td>Intermediate technique, movement combinations and routines for jazz dance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 14B-2</td>
<td>Jazz II</td>
<td>.5 Unit</td>
<td>Designed for the experienced dancer to learn the techniques of jazz dance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
## Course Descriptions

### DNCE 15 — Jazz Performance 1 Unit
- Degree Appropriate, CSU, UC
- May be taken four times for credit.
- 54.00 hours activity.
- Designed for the experienced dancer to work in a rehearsal environment and to be a participant in the beginning elements of concert production. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 15-2 — Jazz Performance .5 Unit
- Degree Appropriate, CSU, UC
- 36.00 hours activity.
- Introduces the experienced dancer to the performance aspects of jazz dance by providing advanced techniques leading to the performance of compositions. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 17 — Jazz Fundamentals 2 Units
- Degree Appropriate, CSU, UC
- 108.00 hours activity.
- Fundamentals of jazz dance and an exploration of composition in jazz form. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 17-2 — Jazz Fundamentals .5 Unit
- Degree Appropriate, CSU, UC
- 36.00 hours activity.
- Introduces the experienced dancer to the performance aspects of jazz dance by providing advanced techniques leading to the performance of compositions. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 18A — Tap 1 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Presents basic technique, rhythms and routines for tap dance. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 18A-2 — Tap I .5 Unit
- Degree Appropriate, CSU, UC
- 36.00 hours activity.
- Presents basic technique, rhythms and routines for tap dance. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 18B — Tap II 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Intermediate technique, rhythms and routines for tap dance. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 18B-2 — Tap II .5 Unit
- Degree Appropriate, CSU, UC
- 36.00 hours activity.
- Intermediate technique, rhythms and routines for tap dance. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 18C — Tap Advanced 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Introduces the experienced dancer to the performance aspects of tap by providing advanced techniques leading to the performance of compositions. Students who repeat this course will improve skills through further instruction.

### DNCE 18D — Tap Advanced II 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Introduces the experienced dancer to the performance aspects of tap by providing advanced techniques leading to the performance of compositions. Students who repeat this course will improve skills through further instruction.

### DNCE 19 — Tap Performance 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Designed for the experienced dancer to work in a rehearsal environment and to be a participant in the beginning elements of concert production. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 19-2 — Tap Performance .5 Unit
- Degree Appropriate, CSU, UC
- 36.00 hours activity.
- Designed for the experienced dancer to work in a rehearsal environment and to be a participant in the beginning elements of concert production. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 20 — Jazz Fundamentals 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Fundamentals of jazz dance and an exploration of composition in jazz form. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 21 — Jazz Performance 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Designed for the experienced dancer to apply previously learned choreographic skill, to conduct stage rehearsals and learn costuming techniques. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 22 — Dance Rehearsal 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Designed for the experienced dancer to apply previously learned choreographic skill, to conduct stage rehearsals and learn costuming techniques. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 24 — Dance Production 2 Units
- Degree Appropriate, CSU, UC
- 108.00 hours activity.
- Designed for the experienced dancer to work in a rehearsal environment and to be a participant in the beginning elements of concert production. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 24-2 — Dance Production .5 Unit
- Degree Appropriate, CSU, UC
- 36.00 hours activity.
- Designed for the experienced dancer to work in a rehearsal environment and to be a participant in the beginning elements of concert production. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 24-3 — Dance Production 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Designed for the experienced dancer to apply previously learned choreographic skill, to conduct stage rehearsals and learn costuming techniques. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 24-4 — Dance Production 1.5 Units
- Degree Appropriate, CSU, UC
- 81.00 hours activity.
- Designed for the experienced dancer to apply previously learned choreographic skill, to conduct stage rehearsals and learn costuming techniques. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 28 — Theater Dance I 1 Unit
- Degree Appropriate, CSU, UC
- 54.00 hours activity.
- Provides an opportunity to learn simple dance excerpts from various theater musicals and/or movies. Students who repeat this course will improve skills through further instruction and practice.

### DNCE 28-2 — Theater Dance I .5 Unit
- Degree Appropriate, CSU, UC
- 36.00 hours activity.
- Provides an opportunity to learn simple dance excerpts from various theater musicals and/or movies. Students who repeat this course will improve skills through further instruction and practice.
### Course Descriptions

<table>
<thead>
<tr>
<th>DNCE 29 — Theater Dance II</th>
<th>.5 Unit</th>
<th>(May be taken four times for credit.)</th>
<th>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNCE 31 — Classical Dance</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.)</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.)</td>
</tr>
<tr>
<td>DNCE 32 — Commercial Dance</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.)</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.)</td>
</tr>
<tr>
<td>DNCE 33 — Improvisation</td>
<td>.5 Unit</td>
<td>(May be taken four times for credit.)</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.)</td>
</tr>
<tr>
<td>DNCE 34 — Dance Directives</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.)</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.)</td>
</tr>
<tr>
<td>DNCE 35 — Repertory</td>
<td>2 Units</td>
<td>(May be taken four times for credit.)</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.)</td>
</tr>
<tr>
<td>DNCE 39A — Alignment and Correctives I</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.)</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.)</td>
</tr>
<tr>
<td>DNCE 39B — Alignment and Correctives II</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.)</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.)</td>
</tr>
</tbody>
</table>

#### DNCE 29 — Theater Dance II
Provides the proficient ballet dancer the opportunity to experience the different schools of ballet technique. Students who repeat this course will improve skills through further instruction and practice.

#### DNCE 31 — Classical Dance
Provides the proficient ballet dancer the opportunity to experience the different schools of ballet technique. Students who repeat this course will improve skills through further instruction and practice.

#### DNCE 32 — Commercial Dance
Provides the proficient ballet dancer the opportunity to experience the different schools of ballet technique. Students who repeat this course will improve skills through further instruction and practice.

#### DNCE 33 — Improvisation
Provides the proficient ballet dancer the opportunity to experience the different schools of ballet technique. Students who repeat this course will improve skills through further instruction and practice.

#### DNCE 34 — Dance Directives
Provides the proficient ballet dancer the opportunity to experience the different schools of ballet technique. Students who repeat this course will improve skills through further instruction and practice.

#### DNCE 35 — Repertory
Provides the proficient ballet dancer the opportunity to experience the different schools of ballet technique. Students who repeat this course will improve skills through further instruction and practice.

#### DNCE 39A — Alignment and Correctives I
Provides the proficient ballet dancer the opportunity to experience the different schools of ballet technique. Students who repeat this course will improve skills through further instruction and practice.

#### DNCE 39B — Alignment and Correctives II
Provides the proficient ballet dancer the opportunity to experience the different schools of ballet technique. Students who repeat this course will improve skills through further instruction and practice.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNCE 39B-2</td>
<td>Alignment and Correctives II</td>
<td>.5 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Based on exercises and concepts developed by Joseph Pilates. Includes intermediate and advanced mat work. Focus will be primarily on apparatus work (on the professional reformer) developing in improved body alignment, strength, flexibility and control. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 40</td>
<td>Conditioning Through Dance</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Improves fitness through the coordination of dance exercises. Focuses on strength, flexibility and range of motion. Designed for the non-dancer. However, balance and coordination will benefit dancer and non-dancer alike. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 40-2</td>
<td>Conditioning Through Dance</td>
<td>.5 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Improves fitness through the coordination of dance exercises. Focuses on strength, flexibility and range of motion. Designed for the non-dancer. However, balance and coordination will benefit dancer and non-dancer alike. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DSPS 10</td>
<td>College Transition Strategies for Students with Disabilities</td>
<td>3 Units</td>
<td>Non-Degree Credit (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. Advisory: Eligibility for READ 80 Introduces students with disabilities to college, including campus resources and college success factors. Explores strategies for successful transition to college. Topics include self-advocacy, college resources, self-management, educational accommodations, effective learning methods, and goal setting.</td>
</tr>
<tr>
<td>DSPS 11</td>
<td>Assessment of Learning Disabilities</td>
<td>1 Unit</td>
<td>Non-Degree Credit (May be taken for Credit/No Credit only.) 18.00 hours lecture. Advisory: Approval by DSPS Counselor or DSPS Staff Introduction to types and causes of learning disabilities and the legal definition of “learning disabled.” Assessment according to statewide assessment procedure. Understanding learning patterns, identifying educational limitations, and evaluating appropriate support services. Orientates students to Mt. SAC's Learning Disability Program.</td>
</tr>
<tr>
<td>DSPS 15</td>
<td>Personalized Career Exploration for Students with Disabilities</td>
<td>1 Unit</td>
<td>Non-Degree Credit (May be taken three times for credit.) 18.00 hours lecture. Self-evaluation including interests, experiences, personality, values, and disability-related limitations as they relate to educational and career decisions. Identification of skills and resources, including those that relate to disability factors. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DSPS 16</td>
<td>Educational and Career Options for Students with Disabilities</td>
<td>1 Unit</td>
<td>Non-Degree Credit (May be taken three times for credit.) 18.00 hours lecture. Students will identify educational and career options. Emphasis on strategies that facilitate disability-sensitive career and educational planning. Barriers to employment and other disability issues are addressed. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DSPS 20</td>
<td>Improving Spelling and Reading of Words</td>
<td>3 Units</td>
<td>Pre-Collegiate (May be taken for Credit/No Credit only.) 54.00 hours lecture. Improving reading and spelling skills for multi-syllabic words. Includes sounding letters, oral movements, and common “rules” for reading and spelling words. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DSPS 30</td>
<td>Academic Success Strategies for Students with Disabilities</td>
<td>1 Unit</td>
<td>Non-Degree Credit (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours lab. Advisory: Concurrent enrollment in ENGL 67 or above, or MATHS0 to MATH 130 Strategies for academic success in relationship to disabilities. Primary emphasis will be on the effects of and strategies for auditory processing, language expression, memory, fluid reasoning and performance speed. Secondary emphasis will be on strategies to improve subject-specific performance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DSPS 31</td>
<td>Memory Strategies for Students with Disabilities</td>
<td>3 Units</td>
<td>Non-Degree Credit (May be taken two times for credit.) 54.00 hours lecture. Advisory: Eligibility for READ 80, Student should have at least one other academic class for application of strategies. Principles of the memory process as it applies to academic coursework. Focus on understanding the memory process, improving specific memory components, identifying key concepts to memorize, and the independent application of memory strategies to students’ other academic courses. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DSPS 32</td>
<td>Technology for Students with Learning Disabilities</td>
<td>3 Units</td>
<td>Non-Degree Credit (May be taken two times for credit.) 54.00 hours lecture. Advisory: Eligibility for ENGL 67 or AMLA 42W and READ 80 orAMLA 32R. Concurrent enrollment in an academic class that requires reading and writing. Students with Learning Disabilities can improve their reading comprehension and written expression as applied to assignments in academic classes through the use of technology. A variety of strategies using technology will be introduced to students that will aid them in understanding and learning assignments and in expressing their ideas in written assignments. They will select several strategies for more in-depth use and will apply them functionally in academic classes. Concurrent enrollment in an academic class that requires reading and writing is advised.</td>
</tr>
<tr>
<td>EDUC 10</td>
<td>Introduction to Education</td>
<td>3 Units</td>
<td>Degree Appropriate, CSU, UC 54.00 hours lecture. Introduction to the field of education for students interested in teaching at the elementary or secondary level. Principles and issues are explored including history, philosophy, politics of education, needs of learners, and educational specialization. Course includes guidance in the selection of a future area of specialization as well as classroom observations.</td>
</tr>
</tbody>
</table>
EDUC 16 — Aspects and Issues in Teaching Service Learning  
3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU, UC  
Advisory: Eligibility for ENGL 68  
Survey of the teaching profession, providing students opportunities to  
explore aspects of the career, including teaching and learning styles,  
state content standards and testing, recent California and national  
legislation, social issues, school funding and teacher rights and  
responsibilities.

ELEC 10 — Introduction to Mechatronics  
2 Units  
18.00 hours lecture.  
Non-Degree Credit  
54.00 hours lab.  
An introduction to the field of mechatronics, a combination of  
conventional electronic technology with mechanical and computer  
technology. Special emphasis is on robotics. Hand on activities include  
the building of a robot.

ELEC 11 — Technical Applications in Microcomputers  
3 Units  
(May be taken two times for credit.)  
Degree Appropriate, CSU  
36.00 hours lecture.  
54.00 hours lab.  
Use of the personal computer (PC) in electronics for technically related  
applications. Includes word processing, spreadsheets, database,  
computer presentation methods, e-mail, and job searches. Students who  
repeat this course will improve skills through further instruction and  
practice.

ELEC 12 — Computer Simulation and Troubleshooting  
2 Units  
(May be taken two times for credit.)  
Degree Appropriate  
18.00 hours lecture.  
54.00 hours lab.  
Advisory: ELEC 51, ELEC 56 taken prior  
Use of the personal computer for simulation and troubleshooting of  
both analog and digital electronic circuits. Circuit analysis, value  
substitution, and fault diagnostics will be done with the emphasis on  
“Electronics Workbench/Multisim” software. Students who repeat this  
course will improve skills through further instruction and practice.

ELEC 50A — Electronic Circuits (DC)  
4 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Advisory: Eligibility for MATH 51; ELEC 61 taken concurrently  
Direct Current (DC) electrical circuits and their applications. Covers DC  
sources, analysis, test equipment, measurements, and troubleshooting of  
resistive devices and other basic components. Includes Ohm’s Law,  
Kirchoff’s law, and network theorems. (Students seeking a survey  
course in electronics should take ELEC 10, Introduction to Mechatronics,  
rather than ELEC 50A or 50B.)

ELEC 50B — Electronic Circuits (AC)  
4 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Advisory: ELEC 50A taken prior  
Alternating Current (AC) electrical circuits and their applications. Covers  
AC sources, analysis (using complex numbers), test equipment,  
measurements, and troubleshooting of basic circuits with capacitors,  
inductors, and resistors. Includes impedance, resonance, filters, and  
decibels.

ELEC 51 — Electronic Devices  
4 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Advisory: ELEC 50B taken prior  
Solid-state devices and circuits, including BJT and FET transistors,  
rectifier diodes, op-amps, voltage regulators, thyristors, oscillators,  
timers, and their applications. Emphasizes configurations, classes, load  
lines, characteristics curves, gain, troubleshooting, measurements, and  
frequency response.

ELEC 53 — Communications Circuits  
4 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Advisory: ELEC 51 taken prior  
Analogue and digital communications circuits. Emphasizes analog and  
digital modulation principles in AM, FM, SSB, PLL, FDM, TDM, modems,  
fiber optics, and telecommunication circuits. Includes multiplexing,  
antennas, and signal propagation.

ELEC 54A — Industrial Electronics  
4 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Advisory: ELEC 51 taken prior  
Industrial electronic components and basic control circuits. Includes time  
delay controls, solid-state controls, relays, opto devices, DC motor  
control, transducers, SCR, and UUT devices.

ELEC 54B — Industrial Electronic Systems  
3 Units  
36.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Advisory: ELEC 54A taken prior  
Expands on circuit theory and demonstrates systems application of  
industrial electronics including robotics, industrial production and  
processes, automation, and programmable and motor controllers.  
Emphasis is on programmable logic controllers (PLCs).

ELEC 55 — Microwave Communications  
4 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Advisory: ELEC 53 taken prior  
Microwave components and circuits and their applications with emphasis  
on satellite technology, including radar, GPS, and others. Stresses Gunn  
diode oscillators, transmission lines, waveguides, Smith Charts, components,  
amplification, frequency analysis, and measurement techniques.

ELEC 56 — Digital Electronics  
4 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Combination of sequential logic circuits emphasizing number systems,  
binary math, basic gates, Boolean algebra, Karnaugh maps, flip-flops,  
counters, and registers. Stresses design and troubleshooting techniques.

ELEC 61 — Electronic Assembly and Fabrication  
2 Units  
(May be taken two times for credit.)  
Degree Appropriate, CSU  
18.00 hours lecture.  
54.00 hours lab.  
Assembly and fabrication techniques in basic soldering, de-soldering,  
and surface mount technology. Construction of coaxial and Category 5  
cabling and connectors. Includes an overview of types of printed circuit  
board design. Students who repeat this course will improve skills  
through instruction and practice.

ELEC 62 — Advanced Surface Mount Assembly and Rework  
2 Units  
(May be taken two times for credit.)  
Non-Degree Credit  
18.00 hours lecture.  
54.00 hours lab.  
Advisory: ELEC 61  
Advanced course in assembly and repair (soldering) on surface mount  
assemblies. Prepares for the IPC surface mount assembly and rework  
certifications. Students who repeat this course will improve skills  
through further instruction and practice.

ELEC 63 — Electronic Assemblies Recertification  
1 Unit  
(May be taken four times for credit.)  
Degree Appropriate  
9.00 hours lecture.  
27.00 hours lab.  
Prerequisite: ELEC 62  
Prepares the technician as an Application Specialist for the IPC-  
7711/IPC-7721 Rework and Repair of Electronic Assemblies certification.  
(Note: Industry requires recertification every two years.)
### COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 66</td>
<td>Electrical Code-Residential</td>
<td>3</td>
<td>Non-Degree Credit</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ELEC 74</td>
<td>Microprocessor Systems</td>
<td>4</td>
<td>Degree Appropriate, CSU</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ELEC 81</td>
<td>Laboratory Studies in Electronics Technology</td>
<td>1</td>
<td>Non-Degree Credit</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ELEC 91</td>
<td>Work Experience in Electronics</td>
<td>1</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ELEC 92</td>
<td>Work Experience in Electronics</td>
<td>2</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ELEC 93</td>
<td>Work Experience in Electronics</td>
<td>3</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ELEC 94</td>
<td>Work Experience in Electronics</td>
<td>4</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>EST 50</td>
<td>Electrical Fundamentals for Cable Installations</td>
<td>4</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>EST 51</td>
<td>Fabrication Techniques for Cable Installations</td>
<td>4</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>EST 52</td>
<td>Cabling and Wiring Standards</td>
<td>4</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>EST 54</td>
<td>Home Theater, Home Integration &amp; Home Security Systems</td>
<td>4</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
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### ELECTRONICS SYSTEMS TECHNOLOGY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 50</td>
<td>Electrical Fundamentals for Cable Installations</td>
<td>4</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>EST 51</td>
<td>Fabrication Techniques for Cable Installations</td>
<td>4</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>EST 52</td>
<td>Cabling and Wiring Standards</td>
<td>4</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>EST 54</td>
<td>Home Theater, Home Integration &amp; Home Security Systems</td>
<td>4</td>
<td>Degree Appropriate</td>
<td>Provides actual on-the-job experience in Electronics at an approved work site which is related to classroom instruction. A minimum of five hours per week of supervised work (60 non-paid clock hours or 75 paid clock hours per semester) is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
**Course Descriptions**

**EMERGENCY MEDICAL SERVICE**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| EST 62       | Electronic Troubleshooting I | 4 Units | 54.00 hours lecture. Degree Appropriate  
Advisory: EST 56  
Troubleshooting basic electronic circuits and systems to component level. Circuits include: power supplies, amplifiers, audio circuits, home theater audio (Dolby 5.1), and video circuits (analog TV). |
| EST 64       | Electronic Troubleshooting II | 4 Units | 54.00 hours lab. Degree Appropriate  
Advisory: EST 62  
Troubleshooting advanced electronic video circuits and systems to component level. Includes digital TV and HDTV (plasma, LCD, DLP). |
| EST 70       | C-7 Low Voltage Systems License Preparation | 2 Units | (May be taken four times for credit.) Degree Appropriate  
36.00 hours lecture.  
Advisory: EST 56 or ECWT 56 taken prior  
Prepares for the California State Contractors C-7 Low Voltage Systems license examination. Students who repeat this course will improve skills through further instruction and practice. |
| EMS 1        | Fundamentals for Paramedics | 4 Units | (May be taken four times for credit.) Degree Appropriate  
72.00 hours lecture.  
Prerequisite: Completed Paramedic Program application, current California EMT-I (Basic) certificate, and six months employment as an EMT-I  
Overview of emergency medical services (EMS) competencies, current practices, medical terminology, emphasis on applied physiology and structure and function of human body systems. Pre-course for the Paramedic Program. Students who repeat this course will improve skills through further instruction and practice. |
| EMS 10       | Pharmacology for Paramedics | 2 Units | 39.00 hours lecture. Degree Appropriate  
13.00 hours lab.  
Prerequisite: Admission to the Paramedic Program recently  
Corequisite: EMS 10, EMS 20, EMS 40, EMS 50, EMS 60  
Commonly used paramedic drugs, with emphasis on dosages supplied and ordered, routes of administration, expected therapeutic outcomes and possible adverse reactions. |
| EMS 20       | Emergency Cardiac Care for Paramedics | 1 Unit | 20.00 hours lecture. Degree Appropriate  
6.00 hours lab.  
Prerequisite: Admission to the Paramedic Program  
Corequisite: EMS 10, EMS 30, EMS 40, EMS 50, and EMS 60  
Certifies paramedics in Basic Life Support (BLS-CPR), Pediatric Advanced Life Support (PALS), and Advanced Cardiac Life Support (ACLS). |
| EMS 30       | Cardiology for Paramedics | 5 Units | 91.00 hours lecture. Degree Appropriate  
Prerequisite: Admission to the Paramedic Program  
Corequisite: EMS 10, EMS 20, EMS 30, EMS 50, EMS 60  
Familiarizes the paramedic with the normal and the diseased heart; includes assessment tools, interpretation of various dysrhythmias and appropriate paramedic interventions. |
| EMS 40       | Paramedic Skills Competency | 4.5 Units | 52.00 hours lecture. Degree Appropriate  
104.00 hours lab.  
Prerequisite: Admission to the Paramedic Program  
Corequisite: EMS 10, EMS 20, EMS 30, EMS 40, EMS 60  
Perfect the paramedic skills required for field operation as a paramedic and for certification in competency-based exams. |
| EMS 50       | Paramedic Theory for Paramedics | 8.5 Units | 156.00 hours lecture. Degree Appropriate  
Prerequisite: Admission to the Paramedic Program  
Corequisite: EMS 10, EMS 20, EMS 30, EMS 40, and EMS 50  
Theories and principles of paramedic practices, including assessment skills, care of the sick and injured at a paramedic level, with applications to anatomy and physiology, pathologic processes, and mechanism of injury. |
| EMS 60       | Paramedic Clinical Internship | 3.5 Units | (May be taken for Credit/No Credit only.) Degree Appropriate  
200.00 hours lecture.  
Corequisite: EMS 60 (May have been previously taken)  
Application of concepts of paramedic theory and practices, with emphasis on patient assessment and utilization of paramedic skills in a hospital setting. |
| EMS 70       | Paramedic Field Internship | 8.5 Units | (May be taken for Credit/No Credit only.) Degree Appropriate  
480.00 hours lecture.  
Prerequisite: Successful completion of Los Angeles County accreditation exam  
Corequisite: EMS 70 (May have been previously taken)  
Application of concepts of paramedic theory and practices, with emphasis on patient assessment and utilization of paramedic skills in a field setting on an operational paramedic unit. |

**EMERGENCY MEDICAL TECHNICIAN**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
</thead>
</table>
| EMT 90      | Emergency Medical Technician I | 10 Units | 144.00 hours lecture. Degree Appropriate  
Prerequisite: High school graduation or equivalent and minimum of 18 years of age  
Approved by the L.A. County and State Departments of Health. Emphasizes the development of skill in recognition of symptoms of illnesses and injuries, and proper procedures of pre-hospital emergency care. Awards an EMT-I Course Completion Certificate, necessary for many jobs in emergency care and is a prerequisite for entry into a paramedic program and most fire department jobs. |
| EMT 91      | Emergency Medical Technician I Refresher | 2 Units | (May be taken four times for credit.) Degree Appropriate  
40.00 hours lecture.  
Prerequisite: Completion of a State or County Department of Health (or out-of-state) approved course and possession of a currently valid EMT-I certificate or one which has expired for no more than 20 months  
Approved by the L.A. County and State Departments of Health. Required of all Emergency Medical Technician-I personnel every two years in order to maintain eligibility for employment in an emergency response agency and to keep certification valid. Course covers all required material and current changes/updates in pre-hospital emergency care at the EMT-I level. |

**Section 10**
**Course Descriptions**

**ENGINEERING**

**ENGR 1 — Introduction to Engineering**  
1 Unit  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
18.00 hours lecture.  
Introduction to the engineering profession; academic requirements; articulation agreements with four-year institutions; engineering ethics; professional engineering licensure; engineering study as a preparation for other careers; academic success strategies.  
**ENGR 40 — Dynamics**  
54.00 hours lecture.  
Prerequisite: ENGR 40  

**ENGR 41 — Statics**  
54.00 hours lecture.  
Prerequisite: PHYS 4A  

**ENGR 42 — Mechanics of Materials**  
54.00 hours lecture.  
Prerequisite: ENGR 40  

**ENGR 43 — Mechanics of Deformable Bodies**  
54.00 hours lecture.  
Prerequisite: ENGR 40  
Study of the behavior of solids; inertial forces; motions of particles; particle and rigid body kinematics. Statics and dynamics of particles and rigid bodies. Dynamics of beams, including the effects of distributed mass.

**ENGR 44 — Electrical Engineering**  
4 Units  
Spring Semester  
Degree Appropriate, CSU, UC  
Prerequisite: PHYS 4B  
Introduction to electrical circuit analysis; systems of units; applications of Kirchhoff's Laws and Thiveinen's Theorems to D-C and A-C circuits. Mesh and nodal analysis; RL and RC transients; phasors and steady-state sinusoidal analysis; response as a function of frequency; current, voltage, and power relationships; polyphase circuits; periodic forcing functions; Norton's Theorem; three-phase circuits.

**ENGR 45 — Properties of Materials**  
4 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
72.00 hours lecture.  
Application of physical and mechanical properties of current engineering materials; and their relation to their internal structure. Atomic structure and bonding; crystalline structures; phase changes and transformations; properties of materials naming and designating systems; corrosion and corrosion protection; mechanism of deformation and fracture; structural control and influence of properties; materials science and materials engineering.

**ENGR 46 — Introduction to Engineering Ethics**  
3 Units  
Degree Appropriate, CSU, UC  
Prerequisite: ENGR 4A  
Introduction to professional ethics and the ethical dilemmas of practicing engineers and technology students. Emphasis on social, environmental, and moral issues in the design, development, and utilization of engineering and scientific products.

**ENGR 47 — Introduction to Engineering Graphics**  
4 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
72.00 hours lecture.  
36.00 hours lab.  
Prerequisite: COMP 15A  
Fundamental engineering graphics and problem solving techniques. Introduction to the engineering profession; academic requirements; articulation agreements with four-year institutions; engineering ethics; professional engineering licensure; design of engineering drawings. Students who repeat this course will improve skills through further instruction and practice.

**ENGR 48 — Introduction to Engineering CAD Applications**  
4 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
72.00 hours lecture.  
36.00 hours lab.  
Advanced course for solving visual and spatial problems graphically. Students who repeat this course will improve proficiency and skill levels.

**ENGINEERING DESIGN TECHNOLOGY**

**EDT 11 — Technical Engineering Drawing I**  
3 Units  
Degree Appropriate, CSU, UC  
72.00 hours lab.  
Advisory: EDT 11, EDT 12  
Graphical expression through CAD, freehand sketching and instrument drawing; orthographic, isometric and oblique drawing and dimensioning, tolerancing. Fasteners, cams, gears, pipe drawings. Descriptive geometry: points, lines and planes. Intersections and developments of solids; sheet metal, electrical and civil engineering/ surveying drawings.

**EDT 12 — Technical Engineering Drawing II**  
3 Units  
Degree Appropriate, CSU, UC  
72.00 hours lab.  
Advisory: EDT 11  
Advanced applications, automated techniques, dimensioning, tolerancing, fasteners, piping, circuit board design, theory used in engineering and industrial drawings. Students will complete a set of working drawings in either manual or CAD for inclusion in a portfolio.

**EDT 13 — Technical Engineering Drawing III**  
3 Units  
Degree Appropriate, CSU, UC  
72.00 hours lab.  
Advisory: EDT 11, EDT 12  
Advanced applications, automated techniques, dimensioning, tolerancing, fasteners, piping, circuit board design, theory used in engineering and industrial drawings. Students will complete a set of working drawings in either manual or CAD for inclusion in a portfolio.

**EDT 14 — Mechanical Design and Analysis**  
3 Units  
Degree Appropriate, CSU, UC  
72.00 hours lecture.  
Advisory: EDT 11, EDT 12  
Use of symbols for tolerance of form and tolerance of position and drawing requirements with respect to actual function and relationship of parts. Use of symbols for tolerance of form and tolerance of position and drawing requirements with respect to actual function and relationship of parts. Use of symbols for tolerance of form and tolerance of position and drawing requirements with respect to actual function and relationship of parts. Use of symbols for tolerance of form and tolerance of position and drawing requirements with respect to actual function and relationship of parts. Use of symbols for tolerance of form and tolerance of position and drawing requirements with respect to actual function and relationship of parts. Use of symbols for tolerance of form and tolerance of position and drawing requirements with respect to actual function and relationship of parts. Use of symbols for tolerance of form and tolerance of position and drawing requirements with respect to actual function and relationship of parts.

**EDT 15 — Advanced CAD Applications**  
4 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
54.00 hours lab.  
Advisory: EDT 11, EDT 12  
Advanced course for solving visual and spatial problems graphically. Applies the principles of orthographic projection and 3-D visualization to solve problems that involve lines, planes, intersections, auxiliary views, and developments. A time saving skill necessary for prospective engineers and technology students.

**EDT 16 — Basic CAD and Computer Applications**  
4 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
54.00 hours lab.  
Advisory: EDT 11, EDT 16  
Intermediate CAD for engineering, explores the 2-D and 3-D environments. 3-D parametric solid modeling, file manipulation related to Windows platforms. Students who repeat this course will improve proficiency and skill levels.

**EDT 18 — Engineering CAD Applications**  
4 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
54.00 hours lab.  
Advisory: EDT 11, EDT 16  
Intermediate CAD for engineering, explores the 2-D and 3-D environments. 3-D parametric solid modeling, file manipulation related to Windows platforms. Students who repeat this course will improve proficiency and skill levels.

**EDT 20 — Technical Descriptive Geometry**  
3 Units  
Degree Appropriate, CSU, UC  
36.00 hours lecture.  
72.00 hours lab.  
Cluster: EDT 89, EDT 90  
Basic CAD (Computer Aided Design and Drafting) and computer application in architecture, engineering and related fields (including basic word processing, spreadsheet, CAD and presentation applications). Students who repeat this course will improve skills through further instruction and practice.

**EDT 21 — Technical Descriptive Geometry II**  
3 Units  
Degree Appropriate, CSU, UC  
36.00 hours lecture.  
72.00 hours lab.  
Advisory: EDT 11  
Advanced course for solving visual and spatial problems graphically. Applies the principles of orthographic projection and 3-D visualization to solve problems that involve lines, planes, intersections, auxiliary views, and developments. A time saving skill necessary for prospective engineers and technology students.

**EDT 24 — Engineering CAD 3-D Solids and Surfaces**  
3 Units  
Degree Appropriate, CSU, UC  
36.00 hours lecture.  
72.00 hours lab.  
Advisory: EDT 18  
Advanced engineering CAD for developing detailed working drawings in 3-D environments, incorporating 3-D parametric solid modeling, bill of materials, and surface development. Students who repeat this course will improve proficiency and skill levels.
ENGLISH: COMPOSITION

ENGL 1A — Freshman Composition 4 Units
(CAN ENGL 2) Degree Appropriate, CSU, UC
72.00 hours lecture.
Prerequisite: ENGL 68 or satisfactory score on the English Placement Test
Develops effective expository writing skills; investigates the principles and methods of composition as applied to the writing of essays and the research paper; emphasizes critical reading of academic material.

ENGL 1AH — Freshman Composition - Honors 4 Units
(CAN ENGL 2) Degree Appropriate, CSU, UC
72.00 hours lecture.
Prerequisite: Acceptance into the Honors Program
Develops effective expository writing skills; investigates the principles and methods of composition as applied to the writing of essays and the research paper; emphasizes critical reading of academic material. An honors course designed to provide an enriched experience. Students may not receive credit for both ENGL 1A and ENGL 1AH.

ENGL 1B — English - Introduction to Literary Types 3 Units
(CAN ENGL 4) Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: ENGL 1A or ENGL 1AH
Critical, oral and written evaluation, analysis, and interpretation of short and long fiction, poetry, and drama. Develops a foundation for personal, cultural, and intellectual growth.

ENGL 1BH — English - Introduction to Literary Types - Honors 3 Units
(CAN ENGL 4) Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: ENGL 1A or ENGL 1AH and acceptance into the Honors Program
Critical, oral, and written evaluation, analysis and interpretation of short and long fiction, poetry, and drama. An honors course designed to provide an enriched experience. Students may not receive credit for both ENGL 1B and ENGL 1BH.

ENGL 1C — Critical Thinking and Writing 4 Units
72.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: ENGL 1A or ENGL 1AH
Develops critical thinking, reading, and writing skills beyond the level achieved in ENGL 1A. Increases the student's capacity for logical analysis and argumentative writing.

ENGL 1CH — Critical Thinking and Writing - Honors 4 Units
72.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: ENGL 1A or ENGL 1AH and acceptance into the Honors Program
Develops critical thinking, reading, and writing skills beyond the level achieved in ENGL 1A. The course will increase the student's capacity for logical analysis and argumentative writing. An honors course designed to provide an enriched experience. Students may not receive credit for both ENGL 1C and ENGL 1CH.

ENGL 8A — Creative Writing - Fiction 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Prerequisite: ENGL 1A or ENGL 1AH
Elements, processes, and techniques of fiction writing. Includes genre, settings, point of view, character sketch, plot development, description, and dialogue with an emphasis of student development as a writer of fiction through practice and discussion.

ENGL 8B — Creative Writing - Poetry 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Prerequisite: ENGL 1A or ENGL 1AH
Emphasizes the student's development as a poet. Students who repeat this course will improve skills through further instruction and practice.

ENGL 9 — Writing the Personal Journal 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Prerequisite: ENGL 1A or ENGL 1AH
Personal exploration, development of creativity, increased comfort with the writing process, and expanded awareness of others' lives through journal writing. Journal methods will be patterned after Dr. Ira Progoff's concept of creativity and growth as well other approaches to journal writing. Students who repeat this course will improve skills by further instruction and practice.

ENGL 10 — Writing Enhancement 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
18.00 hours lecture.
Linked with a corresponding English course, this course provides hands-on writing activities designed to enhance student success and abilities in the linked course. Supplemental learning activities such as individualized instruction; individualized, self-paced practice; group work and student presentations. Students who repeat this course will improve skills through further instruction and practice.

ENGL 64 — Writing Effective Sentences 1 Unit
(May be taken two times for credit.) Pre-Collegiate
(May be taken for option of letter grade or Credit/No Credit.) 18.00 hours lecture.
Prerequisite: Eligibility for ENGL 67
Improve sentence writing skills through the analysis and application of sentence elements. Includes the identification and correction of common sentence problems, such as comma splice, fragment, and run-on. Students who repeat this course will improve skills through further instruction and practice.
## Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 65</td>
<td>Grammar Review</td>
<td>1 Unit</td>
<td>Pre-Collegiate</td>
<td>Expands students' reading, writing and speaking vocabularies through examination of the principles of word formation, emphasizing prefixes, roots, suffixes and the effective use of dictionaries and other reference works. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>ENGL 66</td>
<td>Paragraph Writing</td>
<td>1 Unit</td>
<td>Pre-Collegiate</td>
<td>Using an integrated approach, continues to develop effective writing based on reading, emphasizing the sentence, the outline, the summary, the paragraph and an introduction to the essay. Gives attention to grammar, punctuation and vocabulary. Develops critical thinking through reading comprehension in conjunction with related writing. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ENGL 67</td>
<td>Writing Fundamentals</td>
<td>4 Units</td>
<td>Pre-Collegiate</td>
<td>Offers selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced.</td>
</tr>
<tr>
<td>ENGL 68</td>
<td>Preparation for College Writing</td>
<td>4 Units</td>
<td>Degree Appropriate</td>
<td>Continues to develop effective writing based on reading. Reviews paragraph structure, emphasizes development of the academic essay, and introduces principles of documentation. Continues to develop critical thinking through reading and writing about increasingly complex texts. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ENGL 75</td>
<td>Vocabulary Building</td>
<td>3 Units</td>
<td>Pre-Collegiate</td>
<td>Expands students' reading, writing and speaking vocabularies through examination of the principles of word formation, emphasizing prefixes, roots, suffixes and the effective use of dictionaries and other reference works. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ENGL 81</td>
<td>Language Acquisition</td>
<td>3 Units</td>
<td>Degree Appropriate</td>
<td>Introductory course in language structure, linguistics, language development. Explores first and second-language acquisition. Meets the Commission on Teaching Credentialing standards for Language Acquisition requirement for elementary school teaching credential.</td>
</tr>
<tr>
<td>ENGL 99</td>
<td>Special Projects in English</td>
<td>2 Units</td>
<td>Degree Appropriate</td>
<td>To offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced.</td>
</tr>
<tr>
<td>FCS 80</td>
<td>Financial Planning</td>
<td>3 Units</td>
<td>Degree Appropriate</td>
<td>Functional approach to personal finance, including budget systems, consumer credit, health care and insurance, debt collection systems, status obligation, accumulating reserves. Examines short-term and long-term financial goals. Applicable for personal and professional use. Students may not earn credit for both BUSA 71 and FCS 80.</td>
</tr>
<tr>
<td>FCS 81</td>
<td>Laboratory Studies in Family and Consumer Sciences</td>
<td>1 Unit</td>
<td>Degree Appropriate</td>
<td>This course provides extended laboratory experiences supplementary to those available in the regular program and allows the student to pursue more advanced and complex laboratory projects and experiments. Students who repeat this course will increase skill proficiencies in Family and Consumer Sciences.</td>
</tr>
<tr>
<td>FCS 82</td>
<td>Laboratory Studies in Family and Consumer Sciences</td>
<td>2 Units</td>
<td>Degree Appropriate</td>
<td>This course provides extended laboratory experiences supplementary to those available in the regular program and allows the student to pursue more advanced and complex laboratory projects and experiments. Students who repeat this course will increase skill proficiencies in Family and Consumer Sciences.</td>
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<tr>
<td>FCS 83</td>
<td>Laboratory Studies in Family and Consumer Sciences</td>
<td>3 Units</td>
<td>Degree Appropriate</td>
<td>This course provides extended laboratory experiences supplementary to those available in the regular program and allows the student to pursue more advanced and complex laboratory projects and experiments. Students who repeat this course will increase skill proficiencies in Family and Consumer Sciences.</td>
</tr>
<tr>
<td>FCS 84</td>
<td>Laboratory Studies in Family and Consumer Sciences</td>
<td>4 Units</td>
<td>Degree Appropriate</td>
<td>This course provides extended laboratory experiences supplementary to those available in the regular program and allows the student to pursue more advanced and complex laboratory projects and experiments. Students who repeat this course will increase skill proficiencies in Family and Consumer Sciences.</td>
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<tr>
<td>FCS 91</td>
<td>Work Experience in Family and Consumer Sciences</td>
<td>1 Unit</td>
<td>Provides Family and Consumer Sciences majors with actual on-the-job experience in an approved work site related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work experience placement is not guaranteed but assistance is provided by the Family and Consumer Sciences faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>FCS 92</td>
<td>Work Experience in Family and Consumer Sciences</td>
<td>2 Units</td>
<td>Provides Family and Consumer Sciences majors with actual on-the-job experience in an approved work site related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work experience placement is not guaranteed but assistance is provided by the Family and Consumer Sciences faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>FCS 93</td>
<td>Work Experience in Family and Consumer Sciences</td>
<td>3 Units</td>
<td>Provides Family and Consumer Sciences majors with actual on-the-job experience in an approved work site related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work experience placement is not guaranteed but assistance is provided by the Family and Consumer Sciences faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>FCS 94</td>
<td>Work Experience in Family and Consumer Sciences</td>
<td>4 Units</td>
<td>Provides Family and Consumer Sciences majors with actual on-the-job experience in an approved work site related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work experience placement is not guaranteed but assistance is provided by the Family and Consumer Sciences faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>FASH 10</td>
<td>Fashion Design By Draping</td>
<td>3 Units</td>
<td>Examines the manufacturing of textiles/fabrics and factors that determine the suitability for end use. Topics covered include natural and synthetic fibers, yarns, fabric construction, dyes, finishes, legislation and care. Emphasis is placed on selection criteria for textile product design and recent developments in the textile field.</td>
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<tr>
<td>FASH 17</td>
<td>Textiles</td>
<td>3 Units</td>
<td>Examines the manufacturing of textiles/fabrics and factors that determine the suitability for end use. Topics covered include natural and synthetic fibers, yarns, fabric construction, dyes, finishes, legislation and care. Emphasis is placed on selection criteria for textile product design and recent developments in the textile field.</td>
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<tr>
<td>FASH 20</td>
<td>Illustration for Fashion and Costume Design</td>
<td>3 Units</td>
<td>Examines the manufacturing of textiles/fabrics and factors that determine the suitability for end use. Topics covered include natural and synthetic fibers, yarns, fabric construction, dyes, finishes, legislation and care. Emphasis is placed on selection criteria for textile product design and recent developments in the textile field.</td>
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<tr>
<td>FASH 21</td>
<td>Patternmaking</td>
<td>3 Units</td>
<td>Examines the manufacturing of textiles/fabrics and factors that determine the suitability for end use. Topics covered include natural and synthetic fibers, yarns, fabric construction, dyes, finishes, legislation and care. Emphasis is placed on selection criteria for textile product design and recent developments in the textile field.</td>
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<tr>
<td>FASH 22</td>
<td>Fashion Design By Draping</td>
<td>3 Units</td>
<td>Examines the manufacturing of textiles/fabrics and factors that determine the suitability for end use. Topics covered include natural and synthetic fibers, yarns, fabric construction, dyes, finishes, legislation and care. Emphasis is placed on selection criteria for textile product design and recent developments in the textile field.</td>
<td></td>
</tr>
</tbody>
</table>
FASH 20 — Patternmaking II 3 Units
(May be taken two times for credit.) Degree Appropriate
18.00 hours lecture.
36.00 hours lab.
Prerequisite: FASH 10
Intermediate pattern drafting and flat patternmaking, with the introduction to the sizing of patterns/grading. Development of patternmaking skills to include two-way stretch knits, swimwear, and complex construction. Students apply commercial manufacturing standards in producing size ranges for misses’ and women’s wear, to include skirts, pants, bodices, sleeves and collars. Students who repeat this course will improve skills through further instruction and practice.

FASH 21 — Patternmaking II and Flat 3 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
150.00 hours lab.
Prerequisite: FASH 20
Intermediate pattern drafting and flat patternmaking, with the introduction to the sizing of patterns/grading. Development of patternmaking skills to include two-way stretch knits, swimwear, and complex construction. Students apply commercial manufacturing standards in producing size ranges for misses’ and women’s wear, to include skirts, pants, bodices, sleeves and collars. Students who repeat this course will improve skills through further instruction and practice.

FASH 22 — Patternmaking II and Flat 3 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
150.00 hours lab.
Prerequisite: FASH 20
Intermediate pattern drafting and flat patternmaking, with the introduction to the sizing of patterns/grading. Development of patternmaking skills to include two-way stretch knits, swimwear, and complex construction. Students apply commercial manufacturing standards in producing size ranges for misses’ and women’s wear, to include skirts, pants, bodices, sleeves and collars. Students who repeat this course will improve skills through further instruction and practice.

FASH 23 — Patternmaking II 3 Units
(May be taken two times for credit.) Degree Appropriate
18.00 hours lecture.
54.00 hours lab.
Prerequisite: FASH 21
Intermediate pattern drafting and flat patternmaking, with the introduction to the sizing of patterns/grading. Development of patternmaking skills to include two-way stretch knits, swimwear, and complex construction. Students apply commercial manufacturing standards in producing size ranges for misses’ and women’s wear, to include skirts, pants, bodices, sleeves and collars. Students who repeat this course will improve skills through further instruction and practice.

FASH 24 — Fashion Patternmaking by Computer 3 Units
(May be taken two times for credit.) Degree Appropriate
36.00 hours lecture.
54.00 hours lab.
Advisory: FASH 21
Study of the applications of Computer Aided Design (CAD) patternmaking and grading for the fashion industry. Exploration of drafting techniques, pattern development, flat pattern manipulation and the sizing/grading of patterns. Students who repeat this course will improve skills through further instruction and practice.

FASH 25 — Fashion Computer-Assisted Drawing 3 Units
(May be taken two times for credit.) Degree Appropriate
36.00 hours lecture.
54.00 hours lab.
Advisory: FASH 20
Drawing production flats, colorization and scanning images using computer as a drafting tool. Exploration of popular computer techniques and methods suitable for use in apparel industry. Concentration on Adobe Illustrator and Adobe Photoshop. Students who repeat this course will improve skills through further instruction and practice.

FASH 26 — Fashion Computer Assisted Design 2 Units
(May be taken two times for credit.) Degree Appropriate
18.00 hours lecture.
54.00 hours lab.
Use an advanced, industry-specific CAD system to produce high-level graphic presentations. Create color palettes, textiles, and surface designs, explore texture mapping and how it is used to create a natural drape on the fashion figure; and use the computer as a layout design tool for swatches and vector flat drawings. Students who repeat this course will improve skills through further instruction and practice.

FASH 30 — Fashion Design and Product Development I 3 Units
54.00 hours lecture. Degree Appropriate
Advisory: FASH 25 and FASH 60
Overview of the global environment for product development for fashion. Applies the concepts and methods by which retailers create special store-branded merchandise for targeted customer segments. Students will develop financial and design goals, create product concept and line-boards, and evaluate the aesthetic and commercial results.

FASH 31 — Fashion Design and Product Development II 3 Units
36.00 hours lecture. Degree Appropriate
54.00 hours lab.
Prerequisite: FASH 20, FASH 21 or 22, AND FASH 30
Intermediate fashion design students will create and maintain a personal design sketchbook and work with the basic categories of swim wear, active wear, children’s and junior clothing. Industrial techniques of drawing production flats and design room sketches are taught in addition to the full fashion figure. Projects will include creation of lines including production flats, textile selection, cost sheets, full-color illustrations and full scale patterns.

FASH 32 — Fashion Design and Product Development III 3 Units
36.00 hours lecture. Degree Appropriate
54.00 hours lab.
Prerequisite: FASH 31
Advanced fashion design and product development emphasizing, in portfolio format, a minimum of three lines with production flats, scale patterns, pattern charts, cost sheets and sample garments. A design sketchbook will be maintained. Includes resume preparation and job search appropriate for the fashion design industry.

FASH 33 — Advertising and Promotion 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Characteristics and role of advertising and promotion in business are explored. Emphasis is placed on promotional mix, trend and forecast research, and developing a comprehensive multimedia promotion plan including advertising layout and copy. Students may not receive credit for both FASH 63 and BUSS 33.

FASH 34 — Merchandising and Promotion 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Characteristics and role of advertising and promotion in business are explored. Emphasis is placed on promotional mix, trend and forecast research, and developing a comprehensive multimedia promotion plan including advertising layout and copy. Students may not receive credit for both FASH 63 and BUSS 33.

FASH 36 — Retail Store Management and Merchandising 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Principles and practices used in the management and merchandising of retail stores. Includes all aspects of the critical buying function, merchandising, promotional techniques, site selection, layout, staffing, market positioning and customer service. Students may not receive credit for both FASH 62 and BUSS 50.

FASH 37 — Visual Merchandising Display 3 Units
54.00 hours lab. Degree Appropriate
Characteristics and role of advertising and promotion in business are explored. Emphasis is placed on promotional mix, trend and forecast research, and developing a comprehensive multimedia promotion plan including advertising layout and copy. Students may not receive credit for both FASH 63 and BUSS 33.

FASH 38 — Work Experience in Fashion 3 Units
(May be taken four times for credit.) Degree Appropriate
75.00 hours lab.
Provides hands-on, actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.

FASH 39 — Work Experience in Fashion 2 Units
(May be taken four times for credit.) Degree Appropriate
150.00 hours lab.
Provides fashion students with actual on-the-job experience in an approved work site which is related to classroom-based learning. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. Students who repeat this course will improve skills through further instruction and practice.

FASH 40 — Field Studies 1 Unit
(May be taken two times for credit.) Degree Appropriate
18.00 hours lab.
Pre-trip lectures on the development of the ready-to-wear industry including background information on specific designer studios, factories, and retail stores to be visited, plus travel information for the trip. Students who repeat this course will improve skills through further instruction and practice.
FASH 907-1 — Topics in Fashion Design: Corset Making 2 Units (May be taken two times for credit.) Degree Appropriate 54.00 hours lecture. Corequisite: FASH 90 (May have been taken previously) 36.00 hours lecture. Students who repeat this course will improve skills through further instruction and practice.

FASH 91 — Field Studies - New York 2 Units (May be taken two times for credit.) Degree Appropriate 54.00 hours lecture. Corequisite: FASH 90 (May have been taken previously) Fashion industry travel study in New York City with daily scheduled lectures and field studies of the diverse fashion industries to include major designers, fashion trend services, retailers, manufacturers, costume/textile exhibits and archives, and museums. Students who repeat this course will improve skills through further instruction and practice.

FASH 92 — Field Studies - Fashion Capitals 3 Units (May be taken two times for credit.) Degree Appropriate 54.00 hours lecture. Corequisite: FASH 90 (May have been taken previously) Fashion industry travel study to fashion capitals with daily scheduled lectures and field studies of the diverse fashion industries to include major designers, fashion trend services, retailers, manufacturers, costume/textile exhibits and archives, and museums. Students who repeat this course will improve skills through further instruction and practice.

FIRE TECHNOLOGY

FIRE 1 — Fire Protection Organization 3 Units 54.00 hours lecture. Career options and opportunities in fire protection and related fields; history of fire protection, fire loss analysis, public, quasi-public and private fire protection services; specific fire protection functions; fire chemistry and physics. Advisory: FIRE 1 or equivalent taken prior

FIRE 2 — Fire Prevention Technology 3 Units 54.00 hours lecture. Introduction and history of fire prevention, including codes, IO and correction of hazards, investigation, and safety education. Advisory: FIRE 1 or equivalent taken prior

FIRE 3 — Fire Protection Equipment and Systems 3 Units 54.00 hours lecture. Includes the study of portable fire extinguishing equipment, sprinkler systems, protection systems for special hazards, fire alarm and detection systems, design and operation of sprinkler systems, water supply and fire extinguishers. Advisory: FIRE 1 or equivalent taken prior

FIRE 4 — Building Construction for Fire Protection 3 Units 54.00 hours lecture. Building construction and fire code safety effects on preplanning, engineering, inspections, fire ground operations, fire and building codes relationships. Advisory: FIRE 1 or equivalent taken prior

FIRE 5 — Fire Behavior and Combustion 3 Units 54.00 hours lecture. Theory of how and why fires start, spread and are controlled; in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing of materials, extinguishing agents and fire control techniques. Advisory: FIRE 1 or equivalent taken prior

FIRE 6 — Hazardous Materials/ICS 3 Units 54.00 hours lecture. Hazardous chemicals, their physical properties, use in industry, characteristics when involved in spills, fire and accidents, information regarding emergency procedures, legal requirements, compliance to regulations, health effects and treatment, fire department protocols and responsibilities that meet OSHA requirements. Advisory: FIRE 1 or equivalent taken prior

FIRE 7 — Fire Fighting Tactics and Strategy 3 Units 54.00 hours lecture. Principles of fire control through utilization of manpower, equipment and extinguishing agents, fire command and control procedures, utilization on types of building construction in fire control, review of fire chemistry, pre-fire planning, organized approach to decision making on the fire scene, basic fire fighting tactics and strategy. Advisory: FIRE 1 or equivalent taken prior

FIRE 8 — Fire Company Organization and Management 3 Units 54.00 hours lecture. Review of fire department organization, fire company organization, the company office, personnel administration, communication, fire equipment, maintenance, training, fire prevention, fire fighting, company fire fighting capability, records and reports. Advisory: FIRE 1 or equivalent taken prior

FIRE 9 — Fire Hydraulics 3 Units 54.00 hours lecture. Review of basic mathematics, hydraulic laws and formulas as applied to fire service, application of formulas and mental calculation to hydraulic problems, water supply problems, underwriter requirements for pumps. Advisory: FIRE 1 or equivalent taken prior

FIRE 10 — Arson and Fire Investigation 3 Units 54.00 hours lecture. Introduction to cause, origin, arson, incendiaryism, related laws and types of incendiary fires. Methods of determining fire cause, recognizing and preserving evidence, interviewing and detaining witnesses, procedures for handling juveniles, court procedure and testimony. Advisory: FIRE 1 or equivalent taken prior

FIRE 11 — Fire Apparatus and Equipment 3 Units 54.00 hours lecture. Mechanized equipment operated by the fire service personnel and regulations pertaining to their use. Includes driving laws, driving techniques, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance. Advisory: FIRE 1 or equivalent taken prior

FIRE 12 — Wildland Fire Control 4 Units 80.00 hours lecture. Addresses wildland fire behavior, safety considerations, strategy, tactics, and operational differences within the wildland urban interface. Advisory: ENGL 68 or equivalent taken prior

FIRE 20 — Fire Instructor 1A 2 Units 40.00 hours lecture. Level I preparation for fire science instructors training officers with emphasis on techniques of evaluation, test planning, constructing and using manipulative tests, test analysis, critiques, test security and records. This course applies to California Fire Service Training and Education System certifications. Advisory: FIRE 21 or equivalent taken prior

FIRE 21 — Fire Instructor 1B 2 Units 40.00 hours lecture. Level II preparation for fire science instructors training officers with emphasis on techniques of evaluation, test planning, constructing and using manipulative tests, test analysis, critiques, test security and records. This course applies to California Fire Service Training and Educational Systems certifications. Advisory: FIRE 21 or equivalent taken prior

FIRE 22 — Fire Instructor 2A 2 Units 40.00 hours lecture. Level II preparation for fire science instructors training officers with emphasis on techniques of evaluation, test planning, constructing and using manipulative tests, test analysis, critiques, test security and records. This course applies to California Fire Service Training and Educational Systems certifications. Advisory: FIRE 21 or equivalent taken prior

FIRE 23 — Fire Instructor 2B 2 Units 40.00 hours lecture. Organizational communication skills for training officers with emphasis on leadership, interpersonal relations, developing and conducting staff meetings, assertive and argumentative presentations and encouraging staff participation. A State Board of Fire Science accredited course. Advisory: FIRE 21 or equivalent taken prior
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<tr>
<th>Course Code</th>
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<th>Units</th>
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<tbody>
<tr>
<td>FIRE 24 — Fire Instructor 2C</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Preparation for fire personnel instructor/training officer. Principles of media use in the instruction process, selection of audio-visual and instructional media, employment of basic advanced forms of instructional media, use of computers in the instructional process, individual instructional programs. A State Board of Fire Science accredited course.</td>
</tr>
<tr>
<td>FIRE 30 — Fire Management 1</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 8 or FIRE 86 or equivalent taken prior. State Board of Fire Services accredited course in fire management designed to develop an understanding of the changing role of the fire officer, building leadership skills, appraising and developing employee performance and communication skills.</td>
</tr>
<tr>
<td>FIRE 31 — Fire Management 2A - Organizational Development and Human Relations</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 30 taken prior. Level II California Fire Service Training and Education System chief officers certified course in basic principles of organization and development of general management skills. Includes problem solving, cultural diversity, motivation, performance management and organizational politics.</td>
</tr>
<tr>
<td>FIRE 32 — Fire Management 2B - Fire Service Financial Management</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 30. Budget preparation and financial management of personnel, stations, fire equipment, and other fire department resources.</td>
</tr>
<tr>
<td>FIRE 33 — Fire Management 2D - Master Planning in the Fire Service</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 31. For fire personnel responsible for master planning fire protection needs for a city, county or state fire agency. Covers program and master planning, forecasting, systems, policy analysis and design.</td>
</tr>
<tr>
<td>FIRE 34 — Fire Management 2E - Personnel and Labor</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 31. For fire supervisors and managers responsible for supervision, implementing department policies, diversity, labor relations, human resources and legal issues.</td>
</tr>
<tr>
<td>FIRE 40 — Fire Prevention 1A</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 5, FIRE 86, or equivalent taken prior. First Level I course qualifies the student as a Certified Prevention Officer through the California Fire Service Training and Education System. Includes responsibilities of fire prevention personnel, procedures for correcting hazards, origin and history of fire prevention efforts in the U.S., basic fire prevention functions, occupancy identification, building preparation, record management, exit requirements, electrical hazards, plan review and safety education.</td>
</tr>
<tr>
<td>FIRE 41 — Fire Prevention 1B</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 40 or equivalent taken prior. Second Level I California Fire Service Training and Education System certified course in fire prevention. Includes relationship of life safety codes and building construction principles, exiting requirements, fire protection systems, basic electrical theory, fire drills and training, fire inspection reports, plans specifications processing, and fire prevention complaints.</td>
</tr>
<tr>
<td>FIRE 42 — Fire Prevention 1C</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 40 and FIRE 41 or equivalent taken prior. Third Level I California Fire Service Training and Education System certified course in fire prevention. Includes physical properties of flammable and combustible liquids, storage practices, transportation and controlling of flammable and liquefied gases.</td>
</tr>
<tr>
<td>FIRE 43 — Fire Prevention 2A</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 40, FIRE 41, FIRE 42 or equivalent taken prior. First Level II California Fire Service Training and Education System certified course in fire prevention for career fire personnel. Includes standards, laws and regulations pertaining to construction requirements for buildings, sprinklers and alarm systems, installation procedures and requirements associated with fire protection systems.</td>
</tr>
<tr>
<td>FIRE 44 — Fire Prevention 2B</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 40, FIRE 41, FIRE 42 or equivalent taken prior. Second Level II California Fire Service Training and Education Systems certified course in fire prevention for fire personnel. Includes interpreting the fire and building codes, California codes of regulation pertaining to fire and life safety standards.</td>
</tr>
<tr>
<td>FIRE 45 — Fire Prevention 2C</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 40, FIRE 41, FIRE 42, or equivalent taken prior. Third Level II California Fire Service Training and Education System certified course in fire prevention for fire personnel. Includes standards required for industrial ovens, cleaning and finishing processes, welding, refrigeration systems, medical gasses and fireworks.</td>
</tr>
<tr>
<td>FIRE 50 — Fire Command 1A</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 7, FIRE 86 taken prior. Level I California Fire Service Training and Education System certified course designed for first-in incident commander and company officers. Includes command principles for company officers, initial decision and action processes at a working fire, fire behavior, fireground resources, operations and management.</td>
</tr>
<tr>
<td>FIRE 51 — Fire Command 1B</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 50 or equivalent taken prior. Level I California Fire Service Training and Education System certified course designed for fire officers responsible for hazardous material responses. Includes community planning, research, legislation enforcement and litigation from hazardous material responses.</td>
</tr>
<tr>
<td>FIRE 52 — Fire Command 2A - Command Tactics at Major Fires</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Non-Degree Credit. Advisory: FIRE 51. For fire officers managing fires using the Incident Command System (ICS) when commanding multiple alarms. Includes unified command structures and areas of geographical divisions.</td>
</tr>
<tr>
<td>FIRE 53 — Fire Command 2B - Management of Major Hazardous Material Incidents</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 51. For fire officers responsible for hazardous material responses. Includes community planning, research, legislation enforcement and litigation from hazardous material responses.</td>
</tr>
<tr>
<td>FIRE 54 — Fire Command 2C - High-Rise Fire Tactics</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 51. A system-based approach applied to high-rise fires. Includes pre-fire planning, building inventory, problem identification, ventilation methods, water supply, elevators, life safety and strategy and tactic operations.</td>
</tr>
<tr>
<td>FIRE 55 — Fire Command 2D - Disaster Planning and Management</td>
<td>2 Units</td>
<td>40.00 hours lecture.</td>
<td>Degree Appropriate. Advisory: FIRE 51 taken prior. Level II California Fire Service Training and Education System chief officer certified course for supervisory and managerial fire service personnel responsible for emergency disaster planning and implementing the Standard Emergency Management System, emphasizing the integrated team approach to managing emergencies.</td>
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<tr>
<td>Course Code</td>
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<td>Units</td>
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<tr>
<td>FIRE 56</td>
<td>Fire Command 2E - Wildland Fire Control</td>
<td>2</td>
<td>40.00 hours lecture. Degree Appropriate Advisory: FIRE 51 For supervisory and managerial fire service personnel responsible for management and coordination of an extended wildland fire incident.</td>
</tr>
<tr>
<td>FIRE 60</td>
<td>Fire Investigation 1A</td>
<td>2</td>
<td>40.00 hours lecture. Degree Appropriate Advisory: FIRE 10, FIRE 86, or equivalent taken prior Level 1 California Fire Service Training and Education System certified course designed for firefighters, fire investigators and law enforcement officers assigned to fire investigation. Includes a basic overview of fire scene investigation with the focus on fire scene indicators and determine the fire’s cause and origin.</td>
</tr>
<tr>
<td>FIRE 61</td>
<td>Fire Investigation 1B</td>
<td>2</td>
<td>40.00 hours lecture. Degree Appropriate Advisory: FIRE 60 or equivalent taken prior Level 1 California Fire Service Training and Education System certified course designed for firefighters and investigation personnel. Includes juvenile fire setter, report writing, evidence preservation and collection, interview techniques, motives and fatalities.</td>
</tr>
<tr>
<td>FIRE 62</td>
<td>Fire Investigation 2A - Fire Cause Determination 1</td>
<td>2</td>
<td>40.00 hours lecture. Non-Degree Credit Advisory: FIRE 60, FIRE 61 Designed for in-service fire personnel completing their Fire Investigation II Certification and provides the information to successfully investigate, apprehend, and convict arsonists.</td>
</tr>
<tr>
<td>FIRE 63</td>
<td>Fire Investigation 2B - Fire Cause Determination 2</td>
<td>2</td>
<td>40.00 hours lecture. Non-Degree Credit Advisory: FIRE 61 and FIRE 62 Designed for in-service fire personnel completing their Fire Investigation II Certification that builds on the Fire Investigation 1 course (FIRE 62).</td>
</tr>
<tr>
<td>FIRE 68</td>
<td>Title 19/24 Workshop</td>
<td>1</td>
<td>(May be taken for Credit/No Credit only.) Degree Appropriate 24.00 hours lecture. Advisory: FIRE 40 or equivalent taken prior California Fire Service Training and Education System certified accredited course in fire prevention for fire personnel. Includes standards required for understanding, interpreting and applying State Fire Marshall’s Regulation requirements based on type of occupancy, construction, fire extinguishing systems, exits, alarm systems and institutional occupancies.</td>
</tr>
<tr>
<td>FIRE 65</td>
<td>Special Issues in Fire Technology</td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate 36.00 hours lecture. Develops knowledge and techniques to enable service employees to understand and handle the special problems that arise in various phases of the fire science. Special emphasis will be placed on a particular problem as the need arises. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>FIRE 66</td>
<td>Basic Fire Academy</td>
<td>12</td>
<td>138.00 hours lecture. Degree Appropriate 382.00 hours lab. Prerequisite: FIRE 1 through FIRE 6 or equivalent, PE 50 or equivalent, EMT certified, and either PE-F 50 or PE-F 51 or PE-F 52 (or equivalent) Corequisite: PE-F 53 Instruction in the proper use of standard fire department apparatus and equipment, salvage covers and fire extinguishment techniques, etc., in accordance with the State of California Fire Service codes and other regulations.</td>
</tr>
<tr>
<td>FIRE 67</td>
<td>Explorer Fire Academy</td>
<td>2</td>
<td>Spring Semester Non-Degree Credit (May be taken for Credit/No Credit only.) 22.00 hours lecture. 48.00 hours lab. Specialized Fire Academy designed for fire explorers. Instruction in the proper use of fire and rescue apparatus and equipment and fire extinguishing techniques in accordance with the State of California Fire Service. Includes principles of fire behavior, fire prevention, and fire service operations.</td>
</tr>
<tr>
<td>FIRE 88</td>
<td>Firefighter Exam Preparation</td>
<td>.5</td>
<td>(May be taken four times for credit.) Non-Degree Credit 8.00 hours lecture. Prepares applicants for entry-level firefighter positions for the CWH Research Inc. Firefighter Exam, offered in conjunction with the Los Angeles Area Fire Chief’s Association. Two-hour sessions including administration of written examination.</td>
</tr>
<tr>
<td>FIRE 89</td>
<td>Fire Academy Ladders</td>
<td>1</td>
<td>Summer Semester Non-Degree Credit (May be taken for Credit/No Credit only.) 8.00 hours lecture. 32.00 hours lab. Intensive training in ladder manipulation to prepare students for Fire Academy and physical fitness tests given by the fire departments.</td>
</tr>
<tr>
<td>FIRE 90</td>
<td>Work Experience Fire Science</td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate 150.00 hours activity. Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog Work experience in fire service at an approved work site which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. This course is available to students achieving a minimum of 12 units in fire service. Students who repeat this course will improve skills through further instruction and practice.</td>
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**FRENCH**

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<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRCH 1</td>
<td>Elementary French</td>
<td>4</td>
<td>Degree Appropriate, CSU, UC 72.00 hours lecture. Intended for students without previous exposure to French. Begins to develop the ability to converse, read and write in French. Emphasis is on oral proficiency. Includes the study of principles of language learning, pronunciation, basic vocabulary and grammatical structures. Extensive exposure to the cultures of French-speaking countries.</td>
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</tr>
<tr>
<td>FRCH 2</td>
<td>Continuing Elementary French</td>
<td>4</td>
<td>(CAN FREN 4) Degree Appropriate, CSU, UC 72.00 hours lecture. Prerequisite: FRCH 1 or two years of high school French or equivalent Further development of conversational, reading and writing skills in French, with emphasis on communicative proficiency required in the workplace, everyday use of French, and understanding of structure. Extensive exploration and analysis of the cultures of French-speaking countries.</td>
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<tr>
<td>FRCH 3</td>
<td>Intermediate French</td>
<td>4</td>
<td>(CAN FREN 8) Degree Appropriate, CSU, UC 72.00 hours lecture. Prerequisite: FRCH 2 or equivalent Further development of communicative proficiency with increasing emphasis on reading and writing. Extensive exposure to culture from France and other French-speaking countries.</td>
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</tr>
</tbody>
</table>
### COURSE DESCRIPTIONS

**FRCH 4 — Continuing Intermediate French**
4 Units
(CAN FREN10)  
Degree Appropriate, CSU, UC
May be taken for option of letter grade or Credit/No Credit.
72.00 hours lecture.
Prerequisite: FRCH 3 or equivalent
Continued development of competencies with the goal of attaining intermediate high-level proficiency in French. Increasing emphasis on reading and writing. Extensive exposure to cultural elements such as art, music, film, and history from France and other French-speaking countries.

**FRCH 5 — Advanced French**
4 Units  
Degree Appropriate, CSU, UC
May be taken for option of letter grade or Credit/No Credit.
72.00 hours lecture.
Prerequisite: FRCH 4 or equivalent
Provides further insight into the cultures of France and other French-speaking countries to reach an advanced level of proficiency in the language. Includes analysis of short literary works from diverse cultures, and group discussions about contemporary topics found in films and newspaper articles.

**FRCH 6 — Continuing Advanced French**
4 Units  
Degree Appropriate, CSU, UC
May be taken for option of letter grade or Credit/No Credit.
72.00 hours lecture.
Prerequisite: FRCH 5 or equivalent
Extensive reading and analysis of short literary works from diverse French and French-speaking cultures. Discussion of films, newspaper articles and contemporary topics. Develops fluency in French through group discussions, oral presentations, and writing.

**FRCH 35 — French Language Laboratory**
.5 Unit  
Degree Appropriate, CSU
May be taken for option of letter grade or Credit/No Credit only.
27.00 hours lab.
An independent study laboratory course for students who wish to improve their skills in French; may supplement any other French course. Requires 24 hours in the language laboratory to receive credit. Students who repeat this course will improve skills through further practice and drill.

**FRCH 52 — Conversational French 1**
3 Units  
Degree Appropriate
May be taken for option of letter grade or Credit/No Credit.
54.00 hours lecture.
Prerequisite: FRCH 1 or equivalent
Development of intermediate French conversational skills. Emphasis on collaborative activities and practical use of the language. Extensive exposure to French culture. Grammar is presented in context.

**FRCH 53 — Intermediate Conversational French**
3 Units  
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Prerequisite: FRCH 2 or FRCH 52 or equivalent
Develops intermediate level fluency through expansion of vocabulary and practical use of language.

**FRCH 54 — Continuing Intermediate Conversational French**
3 Units  
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Prerequisite: FRCH 3 or FRCH 53 or equivalent
Develops intermediate-high fluency through further expansion of vocabulary and practical use of language. Students who repeat this course will improve skills through further instruction and practice.

**FRCH 60 — French Culture Through Cinema**
3 Units  
Degree Appropriate, CSU, UC
May be taken for option of letter grade or Credit/No Credit.
54.00 hours lecture.
French culture and history as presented in classic and recent French films. Analysis of characters and political, social and artistic movements in France and other Francophone countries as reflected in the works of French-speaking film directors and writers. Lectures and class discussions conducted in English. All films with English subtitles.

### GEOGRAPHY

**GEOG 1 — Elements of Physical Geography**
3 Units  
(CAN GEOG 2)  
Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: Eligibility for ENGL 68
Study of the natural processes that interact to create the Earth's varying physical environments with emphasis on the inter-relationships of natural processes and systems. General atmospheric circulation, Earth-sun relationships, oceanic circulation, water and energy budgets, plate tectonics, and the shaping of the physical landscape.

**GEOG 1H — Elements of Physical Geography — Honors**
3 Units  
Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: Acceptance into the Honors Program
Study of the natural processes that interact to create the Earth's varying physical environments with emphasis on the inter-relationships of natural processes and systems. General atmospheric circulation, Earth-sun relationships, oceanic circulation, water and energy budgets, plate tectonics, and the shaping of the physical landscape. An honors course designed to provide an enriched experience. Students may not receive credit for both GEOG 1 and GEOG 1H.

**GEOG 1L — Physical Geography Laboratory**
1 Unit  
Degree Appropriate, CSU, UC
Corequisite: GEOG 1 or GEOG 1H (May have been taken previously)
Observations, experiments and demonstrations in a laboratory setting to explore natural earth processes and systems.

**GEOG 1LH — Physical Geography Laboratory — Honors**
1 Unit  
Degree Appropriate, CSU, UC
Corequisite: Acceptance into the Honors Program
Observations, experiments and demonstrations in a laboratory setting to explore natural earth processes and systems. An honors course designed to provide an enriched experience. Students may not receive credit for both GEOG 1L and GEOG 1LH.

**GEOG 2 — Human Geography**
3 Units  
Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Introduction to human geography with emphasis on critical areas of inquiry and research. Focus on the interconnections of place and process in several sites around the globe; comprehension of important terms and concepts; and basic literacy in the geography of place names and in world regional understanding.

**GEOG 2H — Human Geography — Honors**
3 Units  
Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
Introduction to human geography with emphasis on critical areas of inquiry and research. Focus on the interconnections of place and process in several sites around the globe; comprehension of important terms and concepts; and basic literacy in the geography of place names and in world regional understanding. An honors course designed to provide an enriched experience. Students may not receive credit for both GEOG 2 and GEOG 2H.

**GEOG 3 — Map Reading and Interpretation**
3 Units  
Degree Appropriate, CSU
54.00 hours lecture.
Prerequisite: Acceptance into the Honors Program
Provides basic map reading skills with an emphasis on map projections, earth grid systems, principles of map reading, interpretation and use of an atlas. Introduction to skills needed to use and appreciate maps as a form of communication and as a research tool.

**GEOG 5 — World Regional Geography**
3 Units  
Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Developmental study of the world's regions, addressing the major countries in terms of population, resources, economic development, physical environment, and geographic problems.
**Course Descriptions**

**GEOG 8 — The Urban World** 3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
The geographical analysis of past and current patterns of world urbanization. Emphasis will be placed on city origins, growth, development, and current problems.

**GEOG 10 — Introduction to Geographic Information Systems** 3 Units  
Degree Appropriate, CSU, UC  
(May be taken two times for credit.)  
36.00 hours lecture.  
54.00 hours lab.  
Prerequisite: Eligibility for ENGL 68  
Hands-on training in the principles, theory and operations of geographic information systems (GIS), including geospatial data models, analytical functions, data quality, map design and visual communication, and social and environmental applications of GIS.

**GEOG 11 — Intermediate GIS** 3 Units  
Degree Appropriate, CSU, UC  
Spring Semester  
54.00 hours lecture.  
Prerequisite: GEOG 10  
Surveys GIS fundamentals including hands on experience using hardware/software. Emphasizes vector-based data using ArcGIS and raster-based data using the software extensions.

**GEOG 30 — Geography of California** 3 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
Thematic approach to issues, processes and topics relevant to the study of California. Includes an examination of the physical processes that shape the landscapes of California, the interaction of humans with these physical processes (particularly the importance of water), and the cultural and social landscapes that have evolved as a result of this human-environment interface.

**GEOG 99 — Special Projects in Geography** 2 Units  
Degree Appropriate, CSU, UC  
(May be taken four times for credit.)  
36.00 hours lecture.  
Offers selected students recognition for their academic interest and ability and the opportunity to explore their disciplines in depth. Various departments sometimes offer Special Projects courses. The content of each and the methods of study vary from semester to semester and depend on the particular project under consideration. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure enhanced proficiencies.

**GEOG 1 — Introduction to Geology** 4 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
54.00 hours lab.  
Prerequisite: Eligibility for MATH 51  
Introduces students to geological thinking and to the workings of planet Earth. Basic minerals and rocks of Earth’s crust, and essentials of earthquakes, volcanoes, and landscapes, framed by plate tectonics operating in concert with atmosphere and ocean processes. A required course for students entering the geoscience major. Field trips required.

**GEOG 2 — Historical Geology** 4 Units  
Spring Semester  
Degree Appropriate, CSU, UC  
(CAN GEOG 4)  
54.00 hours lecture.  
54.00 hours lab.  
Prerequisite: GEOG 1 or equivalent  
This course traces the sequence of geological events of a developing earth as traced from a primordial beginning to the changes that are occurring now. The interrelationship of the biological and physical processes that are shaping our planet and particularly our evolving and changing continent. Field investigations are required.

**GEOG 3 — Paleontology, Life of the Past** 4 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
54.00 hours lab.  
An introduction to paleontology including the history of paleontology, methods in paleontology, processes of evolution and the floral and faunal succession through geologic time.

**GEOG 6 — Earthquakes** 1 Unit  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
18.00 hours lecture.  
Discussions of seismic hazards in relation to life and property. Includes the study of seismic safety legislation, socio-economic impacts and prediction of earthquakes.

**GEOG 7 — Geology of California** 3 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
A survey course in the geological development of the State of California. Evolution of the state’s natural provinces and their geologic development as it influences and impacts the adjacent areas. Topics include state resources, volcanic activity, coastline development, tectonic development, earthquakes, and geologic principles. Field trips may be required.

**GEOG 8 — Earth Science** 3 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
A survey course that introduces fundamentals of geology, oceanography, meteorology, and astronomy. The companion Earth Science laboratory (GEOG 8L) is recommended for students needing a lab to transfer to a 4-year college/university. Field trips are required.

**GEOG 8L — Earth Science Laboratory** 1 Unit  
Degree Appropriate, CSU, UC  
Corequisite: GEOG 8 or GEOG 8H (May have been taken previously)  
Laboratory applications and problem-solving in geology, oceanography, meteorology, and astronomy. Recommended for students needing a lab to transfer to a 4-year college/university.

**GEOG 8H — Earth Science - Honors** 3 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
Prerequisite: Acceptance into the Honors Program  
An honors course designed to provide an enriched experience. Introduces fundamentals of geology, oceanography, meteorology, and astronomy. The companion Earth Science laboratory (GEOG 8L) is recommended for students needing a lab to transfer to a 4-year college/university. Field trips are required. Students may not receive credit for both GEOG 8 and GEOG 8H.

**GEOG 9 — Environmental Geology** 3 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
For non-science majors. Relevant aspects of the geological environment and the problems caused by modern humans as they use the earth and its resources. Geologic hazards, including earthquakes, volcanoes, landslides, floods, subsidence. Emphasis on geological viewpoints concerning waste disposal, pollution, geothermal energy, fossil fuels, and nuclear power. Recommended for students needing a lab to transfer to a 4-year college/university.

**GEOG 10 — Natural Disasters** 3 Units  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
Surveys the hazards faced by humans from the natural environment. Analyzes a variety of hazards from a geological perspective. Studies the impact humans have on influencing or exacerbating natural disasters. Includes the role of government in responding to natural disasters. Field trips included.

**GEOG 12A — Natural History of California** 3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
Field study of the natural history of the Sierra Nevada and adjacent regions. One 3 day and one 4 day weekend field trip will be required. Students may not receive credit for both BIOL 12A and GEOG 12A.
Course Descriptions

**GEOL 12B — Natural History of California**  
3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
Field study of Peninsular Ranges, Transverse Ranges, Mojave and Colorado Deserts of southern California. Laboratory work is done during one 3-day and one 4-day weekend field trip. Students may not receive credit for both BIOL 128 and GEOL 128.

**GEOL 13 — Evolution of the Earth**  
3 Units  
Degree Appropriate, CSU, UC  
Origin and evolution of the atmosphere, oceans and continents. Special concentration on the developing landforms through the study of plate tectonics.

**GEOL 14 — Field Geology, Sierra Nevada**  
3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
Field studies of the Sierra Nevada geologic provinces and the surrounding areas.

**GEOL 15 — Field Geology, Mojave Desert**  
3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
Field studies of the geology of the Mojave Desert and surrounding areas.

**GEOL 16 — Field Geology, Coast Ranges**  
3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
Field studies of the geology of the Coast Ranges and the San Andreas Fault System.

**GEOL 17 — Field Geology, Death Valley**  
3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
Field studies of the geology of Death Valley and the Basin and Range Province.

**GEOL 19 — Geology Field Studies**  
2 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
108.00 hours lecture.  
324.00 hours lab.  
Geologic field studies of the Southern California landscape to include the Transverse Ranges, Coast Ranges, San Andreas Fault, Great Valley, Sierra Nevada, Owens Valley, and the western Mojave Desert.

**GEOL 99 — Special Projects in Geology**  
2 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
In order to offer students the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have an instructor's authorization before enrolling in this course. Students repeating this course will make individual contact of a more advanced nature to ensure that proficiencies are enhanced.

**GERM 1 — Elementary German**  
4 Units  
(CAN GERM 2)  
Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 68  
For students with no previous German. Develops the ability to converse, read, and write in German. Emphasis on oral proficiency. Includes the study of essentials of pronunciation, vocabulary, idioms, and grammatical structures along with an introduction to Germanic culture.

**GERM 2 — Continuing Elementary German**  
4 Units  
(CAN GERM 4)  
Degree Appropriate, CSU, UC  
Prerequisite: GERM 1 or two years of high school German or equivalent  
Further development of conversational reading and writing skills in German with emphasis on communication skills, expansion of vocabulary, and understanding of structure. Further study of Germanic culture.

**GERM 3 — Intermediate German**  
4 Units  
(CAN GERM 8)  
Degree Appropriate, CSU, UC  
Prerequisite: GERM 2 or three years of high school German or equivalent  
Further development of communicative proficiency in German and exploration of Germanic culture. Further study and review of grammar and expansion of vocabulary. Increasing emphasis on reading and writing in German.

**GERM 35 — German Language Laboratory**  
5 Unit  
Degree Appropriate, CSU  
(May be taken for Credit/No Credit only.)  
27.00 hours lab.  
An independent study laboratory course for students who wish to improve their skills in German. May supplement any current or previous German course. Requires 24 hours using Language Learning Center resources to receive credit. Students who repeat this course will improve their language skills and expand their knowledge of Germanic cultures.

**HIST 1 — History of the United States**  
3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 68  
A survey of the history of the United States from colonial times to the present designed for transfer students who need a one-semester course in United States history to meet general education requirements. (Social Science majors should take History 7-8.) Satisfies the requirement for a course in American history, including the study of American institutions and ideals as required by Title 5 of the California Administrative Code.

**HIST 3 — History of World Civilization**  
3 Units  
54.00 hours lecture.  
The rise and development of civilization from the Stone Age to 1500.

**HIST 3H — History of World Civilization - Honors**  
3 Units  
54.00 hours lecture.  
Honors course designed to provide an enriched experience. Students may not receive credit for both HIST 3 and HIST 3H.

**HIST 4 — History of World Civilization**  
3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 1A  
The rise and development of civilization from 1500 to the present.

**HIST 4H — History of World Civilization - Honors**  
3 Units  
54.00 hours lecture.  
Honors course designed to provide an enriched experience. Students may not receive credit for both HIST 4 and HIST 4H.

**HIST 7 — History of the United States**  
3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 1A  
Survey of American history from Native American origins through post-Civil War Reconstruction with an encompassing approach to the United States and its major ethnic and social groups. Explores the influence of the geography and environment of North America and the ethnic, social, and religious complexity of the population. Also examines political, philosophical, and intellectual influences on the founding fathers, American political institutions, and the citizens of the country. Satisfies the requirement for a course in American history, including the study of American institutions and ideas and the Constitution of the United States as required by Title 5 of the California Administrative Code.
<table>
<thead>
<tr>
<th>COURSE DESCRIPTIONS</th>
</tr>
</thead>
</table>
| **HIST 7H — History of the United States - Honors** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
Prerequisite: Acceptance into the Honors Program  
Survey of American history from Native American origins through post-Civil War Reconstruction with an encompassing approach to the United States and its major ethnic and social groups. Explores the influence of the geography and environment of North America and the ethnic, social, and religious complexity of the population. Also examines political, philosophical, and intellectual influences on the founding fathers, American political institutions, and the citizens of the country. Satisfies the requirement for a course in American history, the study of American institutions and ideas, and the Constitution of the United States as required by Title 5 of the California Administrative Code. An honors course designed to provide an enriched experience. Students may not receive credit for both HIST 7 and HIST 7H. |
| **HIST 7 — History of the United States** 3 Units (CAN HIST10) Degree Appropriate, CSU, UC  
HIST 7+H = CAN HIST SEQ B  
54.00 hours lecture.  
Prerequisite: Eligibility for ENGL 1A  
Survey of American history from 1865 to the present. Designed for history, social science, or humanities majors, or for transfer students who need a year course in United States history to meet general education requirements. Satisfies the requirement for a course in American history, the study of American institutions and ideas, and the Constitution of the United States as required by Title 5 of the California Administrative Code. |
| **HIST 8H — History of the United States - Honors** 3 Units (CAN HIST10) Degree Appropriate, CSU, UC  
HIST 7H+8H = CAN HIST SEQ B  
54.00 hours lecture.  
Prerequisite: Acceptance into the Honors Program  
Survey of American history from 1865 to the present. Designed for history, social science, or humanities majors, or for transfer students who need a year course in United States history to meet general education requirements. Satisfies the requirement for a course in American history, the study of American institutions and ideas, and the Constitution of the United States as required by Title 5 of the California Administrative Code. An honors course designed to provide an enriched experience. Students may not receive credit for both HIST 8 and HIST 8H. |
| **HIST 11 — History of Asia** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
Surveys history of China, Japan, Southeast Asia, India, and the colonial systems from 1600 into the 21st Century. Emphasizes the confrontation between Asia and the Western world. Topics include economic and political systems, religion and art, the splendor of the courts, peasant life and the civil and international wars. |
| **HIST 16 — The Wild West - A History, 1800-1890** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
Prerequisite: Eligibility for ENGL 68  
Surveys the history of the Trans-Mississippi West to acquaint students with the historical significance, events and personalities which make up 19th Century American history. |
| **HIST 19 — History of Mexico** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
The cultural and social history of the Mexican people from pre-Colombian civilization to modern Mexico. |
| **HIST 30 — History of the African American** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 68  
In the general framework of the U.S. historical process, surveys the history of African Americans from the African genesis to 1865, including historical processes and their impact on modern U.S. society. A critical analysis will be made of the contributions of African Americans to the historical development of the United States, and the transformations that have occurred as a result. Satisfies the requirement for a course in American institutions and ideas and the Constitution of the United States as required by Title 5 of the California Administrative Code. |
| **HIST 31 — History of the African American** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
In the general framework of the U.S. historical process, surveys the history of African Americans from the Reconstruction period to the present, including historical processes and their impact on modern U.S. society. A critical analysis will be made of the contributions of African Americans to the historical development of the United States, and the transformations that have occurred as a result. Satisfies the requirement for a course in American institutions and ideas and the Constitution of the United States as required by Title 5 of the California Administrative Code. |
| **HIST 33 — History of Africa** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
Surveys African civilization with major emphasis placed upon political, social and cultural developments. African history will be traced from prehistoric times through colonialism and the emergence of independent African states in the 21st Century. The American relationship with Africa will be considered. |
| **HIST 36 — Women in American History - Beyond the Stereotypes** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
An introductory course placing women's experience within the context of the major themes of American history, addressing issues and debates related to gender construction and identity, Political, economic, and social currents as well as cross cultural dynamics are critically examined and analyzed as gender theory and practices in the context of ethnicity, class, and nation. This course satisfies the requirement for a course in American history including the study of American institutions and ideals, as required by Title 5 of the California Administrative Code. |
| **HIST 39 — California History** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 68  
The social, intellectual, economic, and political development of California and the Pacific Coast from earliest times to the present. |
| **HIST 40 — History of the Mexican American** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 68  
A survey of United States history from colonial times to the present with a special emphasis on the role of La Raza (Hispanics) in the development of the nation. Satisfies the requirement for a course in American history, the study of American institutions and ideals as required by Title 5 of the California Administrative Code. |
| **HIST 44 — History of Native Americans** 3 Units 54.00 hours lecture. Degree Appropriate, CSU, UC  
Advisory: Eligibility for ENGL 1A  
Survey of the history of the United States from Colonial times to the present with a special emphasis on the role of Native Americans. Examines the role Euro-American social, political, and economic movements play in the Native American experience and the mutual relationships generated through these factors. Critically analyzes how the Native American narrative is woven into the fabric of U.S. history and is an essential component of the complete American story. |
| **HIST 99 — Special Projects in History** 2 Units  
(May be taken four times for credit.) Degree Appropriate, CSU, UC  
36.00 hours lecture.  
To offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to a greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced. |
### Course Descriptions

#### HISTOTECHNOLOGY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT 1</td>
<td>Introduction to Histotechnology</td>
<td>1</td>
<td>An overview of the role of histotechnicians in preparation and analysis of tissues samples for diagnostic and research purposes. Introduction to Internet resources, support organizations and periodical references for histotechnicians, as well as regulatory agencies. Students will set up an educational plan and portfolio to be used throughout the remainder of the program.</td>
</tr>
<tr>
<td>HT 2</td>
<td>Scientific Basics for Histologic Technicians</td>
<td>3</td>
<td>Defines all aspects of general laboratory issues including general laboratory protocols (GLP’s), safety, ethics, and terminology relative to the preparation of tissue samples.</td>
</tr>
<tr>
<td>HT 10</td>
<td>Histology</td>
<td>3</td>
<td>Provides histotechnology students with actual on-the-job experience in histology, as well as regulatory agencies. Students will set up an educational plan and portfolio to be used throughout the remainder of the program.</td>
</tr>
<tr>
<td>HT 12</td>
<td>Beginning Histotechniques</td>
<td>5</td>
<td>Practical applications and fundamentals of enzyme and immunological reactions as they relate to tissue staining.</td>
</tr>
<tr>
<td>HT 14</td>
<td>Advanced Histotechniques</td>
<td>4</td>
<td>Practical applications of special stains for carbohydrates, amyloid, connective tissues, muscle and nervous tissues, including silver stains. Introduction to frozen sections, cytology preparation, and microwave technology. Provides the opportunity to gain proficiency in skills acquired in HT 12, Beginning Histotechniques.</td>
</tr>
<tr>
<td>HT 16</td>
<td>Histochemistry/Immunohistochemistry</td>
<td>4</td>
<td>Practical applications and fundamentals of enzyme and immunological reactions as they relate to tissue staining.</td>
</tr>
<tr>
<td>HT 17</td>
<td>Work Experience in Histotechnology</td>
<td>1</td>
<td>Provides histotechnology students with actual on-the-job experience in an approved work setting which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice. Placement by Program Director.</td>
</tr>
<tr>
<td>HT 18</td>
<td>Work Experience in Histotechnology</td>
<td>2</td>
<td>Provides histotechnology students with actual on-the-job experience in an approved work setting which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice. Placement by Program Director.</td>
</tr>
<tr>
<td>HT 19</td>
<td>Work Experience in Histotechnology</td>
<td>3</td>
<td>Provides histotechnology students with actual on-the-job experience in an approved work setting which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice. Placement by Program Director.</td>
</tr>
<tr>
<td>HT 20</td>
<td>Work Experience in Histotechnology</td>
<td>4</td>
<td>Provides histotechnology students with actual on-the-job experience in an approved work setting which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice. Placement by Program Director.</td>
</tr>
</tbody>
</table>

#### HOSPITALITY AND RESTAURANT MANAGEMENT

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 51</td>
<td>Introduction to Hospitality</td>
<td>3</td>
<td>Brief review of the historical development of the hospitality industry; social and economic influences on the current leisure industry; structures. Career opportunities at various levels in hotels, restaurants, food service institutions and private clubs/resorts. Education and experience requirements, personal qualifications, job responsibilities, job procurement and future opportunities.</td>
</tr>
<tr>
<td>HRM 52</td>
<td>Food Safety and Sanitation</td>
<td>1.5</td>
<td>Basic principles of sanitation and safety in the food service industry.</td>
</tr>
<tr>
<td>HRM 53</td>
<td>Dining Room Service Management</td>
<td>3</td>
<td>Skills and knowledge needed for all aspects of dining room service. Exploration of the five different service styles and their relationship to various environments. Table setting styles, buffet set-ups, wine and beverage service, and service as a sales tool are covered. Safety of both customer and staff are discussed.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Description</td>
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<tr>
<td>HRM 54</td>
<td>Basic Cooking Techniques</td>
<td>3</td>
<td>36.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51. Basic principles of preparing foods for commercial operations; the use and identification of commercial tools and equipment; extending recipes; and choosing the proper food grade; evaluation of food products, and equipment usage.</td>
</tr>
<tr>
<td>HRM 55</td>
<td>Hospitality Layout and Design</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Evaluation and application of basic principles of design for food service businesses, including traffic flow and footprint layouts. Students will study successful operations layouts and apply principles to design a business, and choose appropriate furnishings and equipment to complement theme and fit budgets.</td>
</tr>
<tr>
<td>HRM 56</td>
<td>Management of Hospitality Personnel and Operations</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Management skills course for students pursuing a career in supervision within the restaurant/hospitality industry. Application of basic management concepts and techniques necessary to achieve objectives in the management of operations and human resources in restaurant and hospitality businesses including analysis of hospitality workplace; the manager’s responsibilities in training, coaching, and performance appraisal of employees; decision making, leadership, and planning.</td>
</tr>
<tr>
<td>HRM 57</td>
<td>Restaurant Cost Control</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Methods for controlling resources within the hospitality operation to maximize profits without compromising products. Discusses controls in front of the house, the back of the house, purchasing and receiving.</td>
</tr>
<tr>
<td>HRM 58</td>
<td>Fast Food Service Management</td>
<td>2</td>
<td>36.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Basic principles of managing a fast food operation. Comparison with conventional restaurants in pricing, labor needs and facilities. Developing and marketing a positive company image. Practical and legal aspects of franchising versus single ownership. Sanitation and cost controls.</td>
</tr>
<tr>
<td>HRM 60</td>
<td>Purchasing for the Restaurant Industry</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Basic principles of purchasing for the food service industry. Ordering, receiving, storage, characteristics of products and grade selection for different situations are emphasized. Choosing the best supplier, negotiating the best terms and writing product specifications are covered.</td>
</tr>
<tr>
<td>HRM 61</td>
<td>Menu Planning</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Menu development for all facets of the food service industry including retail and contract operations; emphasis on the economics of the menu and the demographics of the area. Analysis of menus with regard to limitations of the facility and staff, pricing and menu design relative to the economy and culture of the target area. Specialty menus such as ethnic, fast food, catering and various contract situations are included.</td>
</tr>
<tr>
<td>HRM 62</td>
<td>Catering</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Comprehensive exploration of the catering business with in-depth study of organizing and creating both on-premise and off-premise events. Marketing and working with clients to combine menu with price. Contracting outside vendors, problem solving and avoiding common problems before they occur.</td>
</tr>
<tr>
<td>HRM 63</td>
<td>Wines and Spirits</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). In-depth coverage of different varieties and types of wines, classification, and wine production, including sparkling, aromatic and fortified wines. Types of beer and methods of production and distillation and fermentation of spirits. Issues of responsible alcoholic beverage service and consumption, and the laws governing alcohol sales are covered. Students must be a minimum of 21 years old to enroll in this course.</td>
</tr>
<tr>
<td>HRM 64</td>
<td>Hospitality Financial Accounting I</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: BUSA 11 or MATH 51. Financial accounting specifically for the hospitality business. Emphasis is on tailoring the Uniform System of Accounting to hotels, restaurants, clubs and other food service operations.</td>
</tr>
<tr>
<td>HRM 65</td>
<td>Hospitality Financial Accounting II</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 64. Financial accounting specifically for the hospitality industry. Provides accounting practices for balance sheet and income statement data related to hotels, restaurants, clubs and other food service operations. Enables students to distinguish between accounting for sole proprietorships, partnerships and corporations.</td>
</tr>
<tr>
<td>HRM 66</td>
<td>Hospitality Law</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Basic principles of contracts, liability and labor as they apply specifically to the hospitality industry. Students will discuss previous cases and decide the fates of fictional litigations as a preventive approach to problems that can occur.</td>
</tr>
<tr>
<td>HRM 67</td>
<td>Food and Beverage Management</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Basic principles of preparing foods for commercial operations; the use and identification of commercial tools and equipment; extending recipes; and choosing the proper food grade; evaluation of food products, and equipment usage.</td>
</tr>
<tr>
<td>HRM 68</td>
<td>Personnel and Operations</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Personnel and Operations within the restaurant/hospitality industry. Application of basic personnel and operations concepts and techniques necessary to achieve objectives in the management of operations and human resources in restaurant and hospitality businesses including analysis of hospitality workplace; the manager’s responsibilities in training, coaching, and performance appraisal of employees; decision making, leadership, and planning.</td>
</tr>
<tr>
<td>HRM 69</td>
<td>Marketing and Sales</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Marketing and working with clients to combine menu with price. Contracting outside vendors, problem solving and avoiding common problems before they occur.</td>
</tr>
<tr>
<td>HRM 70</td>
<td>Introduction to Lodging</td>
<td>3</td>
<td>54.00 hours lecture. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Introduction to basics of the lodging industry. Acquaints students with front office operations, accounting, guest service, housekeeping and food service. Includes human resource management and property management. Enrollment in Work Experience in Restaurant/Food Service (RSTR 91, 92, 93 or 94) is needed for articulation to California Polytechnic State University.</td>
</tr>
<tr>
<td>HRM 71</td>
<td>Work Experience in Restaurant/Hospitality</td>
<td>1</td>
<td>54.00 hours lab. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Work Experience in Restaurant/Hospitality. Provides students with actual on-the-job experience in an approved worksite which is related to classroom-based learning. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Experience placement is not guaranteed, but assistance is provided by faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>HRM 72</td>
<td>Work Experience in Restaurant/Hospitality</td>
<td>2</td>
<td>54.00 hours lab. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Work Experience in Restaurant/Hospitality. Provides students with actual on-the-job experience in an approved worksite which is related to classroom-based learning. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Experience placement is not guaranteed, but assistance is provided by faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>HRM 73</td>
<td>Work Experience in Restaurant/Hospitality</td>
<td>3</td>
<td>54.00 hours lab. Degree Appropriate, CSU. Corequisite: HRM 51 (May have been taken previously). Work Experience in Restaurant/Hospitality. Provides students with actual on-the-job experience in an approved worksite which is related to classroom-based learning. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Experience placement is not guaranteed, but assistance is provided by faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
HRM 94 — Work Experience in Restaurant/Hospitality 4 Units
(May be taken four times for credit.) 
Degree Appropriate, CSU
(May be taken for Credit/No Credit only.)
300.00 hours lab.
Prerequisite: Completion with Work Experience regulations as designated in the College Catalog
Provides students with actual on-the-job experience in an approved worksite which is related to classroom-based learning. A minimum of 75 paid or non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work experience placement is not guaranteed, but assistance is provided by the faculty. Students who repeat this course will improve skills through further instruction and practice.

INSPECTION AND ESTIMATING, BUILDING
INS 17 — Legal Aspects of Construction 3 Units
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Advisory: INS 70 taken prior or concurrently or equivalent experience
Fundamentals of the legal aspects of the construction industry involving homeowner, contractor and builder/developer. Includes codes, licensing, bonds, and lien laws.

INS 67 — Reading Construction Drawings 3 Units
Degree Appropriate
Fall Semester
54.00 hours lecture.
Fundamentals of reading construction drawings as related to architecture, construction, interior design, and related fields.

INS 70 — Elements of Construction 3 Units
Degree Appropriate, CSU
54.00 hours lecture.
Fundamentals of construction processes, terminology and procedures. Provides an overview of the construction industry to those who may have an interest in the construction industry and related fields.

INS 71 — Construction Estimating 3 Units
Degree Appropriate, CSU
54.00 hours lecture.
Basics of bidding procedures and interrelationship of documents and estimating. Detailed calculation of cost based on the amount of required building materials using actual working drawings, estimating forms, and cost data courses.

COURSE DESCRIPTIONS

INSP 72 — Fundamentals of Construction Inspection 3 Units
Fall Semester
Degree Appropriate
54.00 hours lecture.
Advisory: Completion of a curriculum in building construction or equivalent experience
Construction inspection of light frame wood construction and steel structures. Topics include vertical and horizontal loads, stress analysis, framing and structural standards of lumber and steel, metallurgy and welding.

INTERIOR DESIGN
ID 100 — Fundamentals of Interior Design 3 Units
54.00 hours lecture.
Degree Appropriate, CSU
Application of design principles and elements in planning of total interior environments that meet individual, functional, legal and environmental needs. Selection of all materials and products used in interior environments will be emphasized for the functional aesthetic quality. (Recommended concurrent enrollment in ID 105)

ID 105 — Interior Design Studio I 2 Units
18.00 hours lecture.
Degree Appropriate, CSU
Corequisite: ID 100 (May have been taken previously)
Studio course designed to apply concepts and theories presented in the lecture course, ID 100. It is recommended that this course be taken concurrently with the lecture class. Emphasis is placed on design process in developing solutions for design projects.

ID 120 — Interior Design Careers 2 Units
36.00 hours lecture.
Degree Appropriate, CSU
Advisory: Eligibility for ENGL 68
A survey of the Interior Design profession, industry, related occupations and work sites. The course will emphasize personal, educational, and professional qualifications required for entry into the Interior Design and related professions.

ID 130 — Applied Color and Design Theory 4 Units
54.00 hours lecture.
Degree Appropriate, CSU
Design theory and application. Utilization of tools, materials, and equipment to develop technical skills applicable to interior, architectural and other related fields of design. Exploration of cultural heritage and psychological implication of design.

ID 150 — Interior Materials and Products 4 Units
72.00 hours lecture.
Degree Appropriate, CSU
Advisory: ID 100
Analysis, application, and evaluation of products and materials used in Interior Design. Includes interior textiles, furnishings and finish materials and products.

ID 150A — Interior Materials and Products 2 Units
36.00 hours lecture.
Degree Appropriate, CSU
Advisory: ID 100
Analysis, application, and evaluation of products and materials used in interior design. Includes textiles, rugs, carpet, upholstered furniture and window treatments.

ID 150B — Interior Materials and Products 2 Units
36.00 hours lecture.
Degree Appropriate, CSU
Advisory: ID 100
Analysis, application and evaluation of products and materials used in interior design. Includes resilient flooring, casegoods, and interior architectural finishing materials.

ID 170 — Space Planning 3 Units
Spring Semester
Degree Appropriate, CSU
36.00 hours lecture.
54.00 hours lab.
Advisory: ID 100 or ID 130 or ARCH 11 or ARCH 21
The application of programming theory and techniques in residential and commercial space planning. Skills in drafting and presentation techniques are emphasized in the studio.

ID 180 — History of Interior Architecture & Furnishings I 3 Units
Fall Semester
Degree Appropriate, CSU
54.00 hours lecture.
The historical relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of design heritage from antiquity through the 19th Century in France. Emphasis is placed on style development as it relates to social, economic and political influences.

ID 190 — History of Interior Architecture & Furnishings II 3 Units
Spring Semester
Degree Appropriate, CSU
54.00 hours lecture.
The historical relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of design heritage with Sixteenth Century England and America and analyzes the influences and changes in design to the present. Emphasis is placed on style development as it relates to social, economic and political forces.

ID 210 — Fundamentals of Lighting 3 Units
Spring Semester
Degree Appropriate, CSU
54.00 hours lecture.
Advisory: ID 100 and Eligibility for ENGL 68
The fundamental relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of design heritage. This course begins with Sixteenth Century England and America and analyzes the influences and changes in design to the present. Emphasis is placed on style development as it relates to social, economic and political forces.

ID 10A — Interior Materials and Products 2 Units
36.00 hours lecture.
Degree Appropriate, CSU
Advisory: ID 100
Analysis, application, and evaluation of products and materials used in interior design. Includes textiles, rugs, carpet, upholstered furniture and window treatments.

ID 150B — Interior Materials and Products 2 Units
36.00 hours lecture.
Degree Appropriate, CSU
Advisory: ID 100
Analysis, application and evaluation of products and materials used in interior design. Includes resilient flooring, casegoods, and interior architectural finishing materials.

ID 170 — Space Planning 3 Units
Spring Semester
Degree Appropriate, CSU
36.00 hours lecture.
54.00 hours lab.
Advisory: ID 100 or ID 130 or ARCH 11 or ARCH 21
The application of programming theory and techniques in residential and commercial space planning. Skills in drafting and presentation techniques are emphasized in the studio.

ID 180 — History of Interior Architecture & Furnishings I 3 Units
Fall Semester
Degree Appropriate, CSU
54.00 hours lecture.
The historical relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of design heritage from antiquity through the 19th Century in France. Emphasis is placed on style development as it relates to social, economic and political influences.

ID 190 — History of Interior Architecture & Furnishings II 3 Units
Spring Semester
Degree Appropriate, CSU
54.00 hours lecture.
The historical relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of design heritage with Sixteenth Century England and America and analyzes the influences and changes in design to the present. Emphasis is placed on style development as it relates to social, economic and political forces.

ID 210 — Fundamentals of Lighting 3 Units
Spring Semester
Degree Appropriate, CSU
54.00 hours lecture.
Advisory: ID 100 and Eligibility for ENGL 68
The fundamental relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of design heritage. This course begins with Sixteenth Century England and America and analyzes the influences and changes in design to the present. Emphasis is placed on style development as it relates to social, economic and political forces.
course will improve skills through further instruction and practice. 
Assistance is provided by Interior Design faculty. Students who repeat this through the semester. Internship placement is not guaranteed, but is recommended that the hours per week be equally distributed. Hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Internship placement is not guaranteed, but assistance is provided by Interior Design faculty. Students who repeat this course will improve skills through further instruction and practice.

ID 230 — Business and Professional Practice 3 Units
Spring Semester
54.00 hours lecture.
Prerequisite: ID 100
Advisory: ID 120
The business and professional management of an interior design practice including legal issues, project management and business practices.

ID 240A — Interior Design Internship Seminar 1 Unit
Spring Semester
18.00 hours lecture.
Corequisite: ID 240B and ID 120 (May have been taken previously)
Advisory: ID 170
Students share and critique experiences, emphasizing professionalism and problem solving techniques related to internship experience (ID 240B). Students who repeat this course will have additional learning experiences by being placed in a different work site.

ID 240B — Interior Design Internship 1 Unit
Spring Semester
54.00 hours lecture.
Corequisite: ID 240A
Supervised internship related to classroom-based learning at a work site related to Interior Design. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Internship placement is not guaranteed, but assistance is provided by Interior Design faculty. Students who repeat this course will improve skills through further instruction and practice.

ID 240C — Interior Design/Kitchen & Bath Internship 2 Units
(May be taken two times for credit.)
Fall Semester
Degree Appropriate, CSU
150.00 hours lab.
Corequisite: ID 240B (May have been taken previously)
Supervised internship related to classroom-based learning at a National Kitchen and Bath member work site. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Internship placement is not guaranteed, but assistance is provided by Interior Design faculty. Students who repeat this course will improve skills through further instruction and practice.

ID 250 — Codes and Specifications for Interior Design 2 Units
Fall Semester
Degree Appropriate, CSU
36.00 hours lecture.
Advisory: ID 215
Explores local, state, and federal regulations, codes and specifications concerning life-safety issues, ADA, and universal design requirements relative to residential and contract design. Attention is given to performance, health safety, and universal design for estimating and specifying interior materials and products.

ID 260 — Rendering and Rapid Visualization 2 Units
18.00 hours lecture.
Degree Appropriate, CSU
54.00 hours lab.
Application of the methods, techniques and tools used in illustrating interior spaces and products with an emphasis on rapid production.

ID 265 — Interior Design Studio III - Kitchens 2 Units
Fall Semester
Degree Appropriate, CSU
18.00 hours lecture.
Corequisite: ID 240B (May have been taken previously)
Supervised internship related to classroom-based learning at a work site related to Interior Design. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Internship placement is not guaranteed, but assistance is provided by Interior Design faculty. Students who repeat this course will improve skills through further instruction and practice.

ID 275 — Interior Design Studio IV - Bath Design 2 Units
18.00 hours lecture.
Degree Appropriate, CSU
54.00 hours lab.
Analysis and application of the design process for space planning, specifications of materials and equipment for bathrooms.

ITAL 1 — Elementary Italian 4 Units
72.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: ITAL 1 or two years of high school Italian or equivalent
Further development of conversational, reading and writing skills in Italian with special emphasis on verbs, grammar and extension of vocabulary. Further study of Italian culture.

ITAL 2 — Continuing Elementary Italian 4 Units
72.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: ITAL 1 or two years of high school Italian or equivalent
Further development of conversational, reading and writing skills in Italian with special emphasis on verbs, grammar and extension of vocabulary. Further study of Italian culture.

ITAL 3 — Intermediate Italian 4 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
72.00 hours lecture.
Prerequisite: ITAL 2 or equivalent
Development of intermediate Italian language skills and their use as tools in exploring Italian civilization. Further study and review of grammar, exercises in word building, derivation and the extension of the active and recognition vocabularies. Extensive exposure to Italian culture, such as film, music and history.

ITAL 4 — Continuing Intermediate Italian 4 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
72.00 hours lecture.
Prerequisite: ITAL 3 or equivalent
Further practice in speaking and writing of intermediate Italian. Collateral reading in Italian. Extensive exposure to cultural elements from Italy such as art, music, film and history.

ITAL 5 — Advanced Italian 4 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
72.00 hours lecture.
Prerequisite: ITAL 4 or equivalent
Emphasis is placed on increased facility to read and write advanced Italian. Cultural insights are developed through the study of various Italian literary types.

ITAL 6 — Continuing Advanced Italian 4 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
72.00 hours lecture.
Prerequisite: ITAL 5 or equivalent
Extensive advanced reading, writing, and speaking in Italian that further develop cultural insight through the study of various Italian literary types.

ITAL 10 — Italian Language Laboratory .5 Unit
(May be taken for four times for credit.)
Degree Appropriate, CSU
27.00 hours lab.
Prerequisite: Concurrent or previous enrollment in Italian
An independent study laboratory course for students who wish to improve their skills in Italian; may supplement any other Italian course. Requires 24 hours in the language laboratory to receive credit. Students who repeat this course will improve skills through further instruction and practice.
**Course Descriptions**

**ITAL 52 — Conversational Italian**  
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
Prerequisite: ITAL 1 or equivalent  
Development of elementary Italian conversational skills. Emphasis on collaborative activities and practical use of the language. Extensive exposure to Italian culture. Grammar is presented in context.

**ITAL 53 — Continuing Conversational Italian**  
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
Prerequisite: ITAL 2 or ITAL 52 or equivalent  
Development of intermediate Italian conversational skills. Emphasis on collaborative activities and practical use of the language. Extensive exposure to Italian culture. Grammar is presented in context.

**ITAL 54 — Advanced Conversational Italian**  
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
Prerequisite: ITAL 3 or ITAL 53 or equivalent  
Development of advanced Italian conversational skills. Emphasis on collaborative activities and practical use of the language. Extensive exposure to Italian culture. Grammar is presented in context. Students who repeat this course will improve their skills through further instruction and practice.

**ITAL 60 — Italian Culture Through Cinema**  
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
Italian culture through cinema from 1900 through analysis of the aesthetic, literary, artistic and philosophical movements in Italy as reflected in the works of the Italian film makers and writers. Lecture and class discussion to be conducted in English; film presentation with English subtitles.

**JAPANESE**

**JAPN 1 — Elementary Japanese**  
4 Units  
Degree Appropriate, CSU, UC  
(CAN JAPN 2)  
(May be taken for Credit/No Credit only.)  
72.00 hours lecture.  
Intended for students without previous exposure to Japanese. Begins to develop the ability to converse, read, and write in Japanese. Includes the study of essentials of pronunciation, vocabulary, idioms, and grammatical structures. Introduction to Japanese culture.

**JAPN 2 — Continuing Elementary Japanese**  
4 Units  
Degree Appropriate, CSU, UC  
(CAN JAPN 4)  
(May be taken for option of letter grade or Credit/No Credit.)  
JAPN 1 + 2 = CAN JAPN SEQ A  
72.00 hours lecture.  
Further development of conversational, reading and writing skills in Japanese with special emphasis on verbs, grammar, and extension of vocabulary. Includes a discussion of Japanese culture.

**JAPN 3 — Intermediate Japanese**  
4 Units  
Degree Appropriate, CSU, UC  
(CAN JAPN 8)  
(May be taken for option of letter grade or Credit/No Credit.)  
JAPN 3 + 4 = CAN JAPN SEQ B  
72.00 hours lecture.  
Prerequisite: JAPN 2 or equivalent  

**JAPN 4 — Continuing Intermediate Japanese**  
4 Units  
Degree Appropriate, CSU, UC  
(CAN JAPN10)  
(May be taken for option of letter grade or Credit/No Credit.)  
JAPN 3 + 4 = CAN JAPN SEQ B  
72.00 hours lecture.  
Prerequisite: JAPN 3 or equivalent  

**JAPN 5 — Advanced Japanese**  
4 Units  
Degree Appropriate, CSU, UC  
(CAN JAPN 48)  
(May be taken for option of letter grade or Credit/No Credit.)  
JAPN 3 + 4 = CAN JAPN SEQ B  
72.00 hours lecture.  
Prerequisite: JAPN 4 or equivalent  
Advisory: Eligibility for ENGL 68  
Advanced Japanese communication skills with emphasis on conversational skills for daily and social settings in Japanese culture. Advanced study of grammar, vocabulary, Kanji characters, listening, speaking, reading, and writing. Extensive exposure to cultural elements from Japan such as art, music, film, and history.

**JAPN 35 — Japanese Language Laboratory**  
.5 Unit  
Degree Appropriate, CSU  
(CAN JAPN 7)  
(May be taken for Credit/No Credit only.)  
27.00 hours lab.  
Corequisite: Concurrent or previous enrollment in Japanese  
An independent study laboratory course for students who wish to improve their skills in Japanese; may supplement any other Japanese course. Requires 24 hours in the language laboratory to receive credit. Students who repeat this course will improve their skills through further practice and drill.

**JAPN 53 — Conversational Japanese**  
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
Prerequisite: JAPN 2 or equivalent  

**JOURNALISM**

Cluster repeatability:  
Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.  
Cluster: JOUR 112, JOUR 113

**JOUR 100 — Mass Media and Society**  
3 Units  
Degree Appropriate, CSU, UC  
(CAN JOUR 4)  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
Prerequisite: ENGL 1A  
Survey of the mass media and the interrelationships of media with society, including history, structure, and trends. Additionally, the following topics will be covered as they pertain to the mass media: economics, technology, law and ethics and such social issues as gender and cultural diversity.

**JOUR 101 — Beginning News Writing**  
3 Units  
Degree Appropriate, CSU, UC  
(CAN JOUR 2)  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
Prerequisite: ENGL 1A  
Evaluating, gathering, and writing news in accepted journalistic style under newsroom conditions. Includes role of the reporter and the legal and ethical issues relating to reporting. The student will have writing and reporting experiences, including personal interviews, speech, meeting and other event coverage, deadline writing, and use of AP style.

**JOUR 102 — Intermediate News Writing**  
3 Units  
Spring Semester  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lecture.  
Prerequisite: JOUR 101 or JOUR 113  
Development of intermediate news writing skills combined with the composition of complex journalistic writing forms. Students will write stories for the Mountaineer student newspaper.
JOUR 103 — Working on the Newspaper 3 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
18.00 hours lecture.
108.00 hours lab.
Corequisite: JOUR 101 or JOUR 1A (May have been taken previously)
Practical experience preparing the college newspaper. Duties may include reporting, story writing, photography, layout and design and copy editing. Students who repeat this class will improve skills through further instruction and practice.

JOUR 104 — Newspaper Layout & Design 3 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
54.00 hours lab.
An introduction to newspaper design using desktop publishing techniques. Includes hands-on experience publishing the student newspaper. Students who repeat this course will improve skills through further instruction and practice.

JOUR 105 — Editor Training 1 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lab.
Advisory: JOUR 101 or JOUR 1A
Stresses leadership skills in a journalistic setting using the student newspaper as a practical laboratory. Designed for students selected to serve as editors or managers of the paper. Students who repeat this course will improve skills through further instruction and practice.

JOUR 106 — Introduction to Visual Journalism 3 Units
Fall Semester Degree Appropriate, CSU
(May be taken two times for credit.)
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
36.00 hours lab.
Corequisite: COMP 60 or COMP 62 (May have been taken previously)
Photography journalism assignments using still, digital, and video cameras for offset printing (newspaper, magazine, etc.) and digital Web presentations. Basics of photojournalism, digital camera operation, shooting techniques, photo-editing software, cutline writing, video and audio production and editing, and Web homepage design production. Students who repeat this course will improve skills through further instruction and practice.

JOUR 107 — Race, Culture, Sex, and Mass Media Images 3 Units
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Advisory: ENGL 1A
Studies the role mass media plays in the social, political, and economic integration of minorities, cultures, women, and gays and lesbians into American society. Examines ways that mass media impacts public attitudes and behaviors.

JOUR 108 — Writing for Public Relations 3 Units
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Prerequisite: JOUR 101 or JOUR 1A
An introduction to public relations writing including news releases, fact sheets, feature stories, institutional publications, and newsletters. The relationships between public relations, the mass media, and society will be explored.

JOUR 109 — Public Relations Internship 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
225.00 hours lab.
Advisory: JOUR 108 or JOUR 8
Field work in pubic relations. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.

JOUR 110 — Magazine Writing and Production 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
54.00 hours lab.
Prerequisite: JOUR 101 or JOUR 1A
Publication of a student-run magazine in a professional setting. Activities may include fiction and nonfiction writing, editing, ethics, interviewing, photography, art and layout. Overview of the magazine industry and markets explored. Students who repeat this course will improve skills through further instruction and practice.

JOUR 111 — Broadcast News Writing 3 Units
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Prerequisite: JOUR 1A or JOUR 101
Intensive news gathering and writing for radio and television. Newsroom planning. Story organization, and functions of a broadcast newsroom explored. Emphasis on assignments for both audio and video tape media. Lecture and discussion of issues and responsibilities confronting broadcast journalists including ethics and changing technology.

JOUR 112 — Work Experience in Journalism 3 Units
(May be taken four times for credit.) Non-Degree Credit
(May be taken for Credit/No Credit only.)
225.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog. JOUR 101 or JOUR 1A and ENGL 1A
This course is designed to provide majors with actual on-the-job experience in an approved work station which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.

JOUR 113 — Work Experience in Journalism 4 Units
(May be taken four times for credit.) Non-Degree Credit
(May be taken for Credit/No Credit only.)
300.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog. JOUR 101 or JOUR 1A and ENGL 1A
This course is designed to provide majors with actual on-the-job experience in an approved work station which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.

LATN 1 — Elementary Latin 4 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
72.00 hours lecture.
Advisory: Eligibility for READ 90 or eligibility for AMLA 33R
This course is designed for students with little or no prior experience in Latin. Emphasizes the ability to read basic Latin as it was written during the early, classical, and post-classical periods. Includes the study of vocabulary, grammar, Roman culture, and the history of the Latin language.

LATN 2 — Continuing Elementary Latin 4 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
72.00 hours lecture.
Prerequisite: LATN 1 or one year of high school Latin (C or better) and completed within one year of course registration
Advisory: Eligibility for READ 90 or eligibility for AMLA 33R
Second semester of coursework for students with prior coursework in Latin. Daily practice in vocabulary, grammar, and reading. Explores Roman history and culture.
**LEAD 55 — Exploring Leadership** 3 Units
54.00 hours lecture.
Degree Appropriate, CSU
Designed to introduce students to the fundamental elements of leadership. Explores leadership theories and models, values and beliefs. Develops a personal philosophy of leadership that includes an understanding of self, others and community. Prepares students for leadership roles in college and community settings.

**LEARN 61 — Skills Development Laboratory** 1 Unit
(May be taken two times for credit.) Pre-Collegiate
Orients and individualized instruction in the following subjects: reading comprehension, vocabulary, writing, English grammar, elementary math, algebra review, study techniques (note-taking, goal-setting, test-taking, etc.) One unit requires a total expenditure of 48 hours in lab. Students who repeat this course will improve skills through further instruction and practice.

**LEARN 81 — Improving Writing** 3 Units
(May be taken three times for credit.) Pre-Collegiate
(May be taken for Credit/No Credit only.)
54.00 hours lecture.
24.00 hours lab.
No Course Description

**LIBR 1 — Information Resources and Research Methods** 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU, UC
54.00 hours lecture.
Advisory: Eligibility for ENGL 68
Research methods that provide lifelong information competency necessary for independent research and critical thinking. Activities include finding, evaluating and documenting information using traditional and electronic resources, including the Internet. Students who repeat this course will improve skills through further instruction and practice.

**LIBR 1B — Introduction to Library Research** 1 Unit
(May be taken two times for credit.) Degree Appropriate, CSU, UC
54.00 hours lecture.
Advisory: Eligibility for ENGL 68
Basic research skills for lifelong information competency necessary for independent research and critical thinking. Topics include search strategies, citation, and use of library resources.

**LIBR 1B — Using Electronic Resources** 1 Unit
(May be taken two times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
18.00 hours lecture.
Advisory: Eligibility for ENGL 68
Research skills using electronic resources for lifelong information competency. Topics include databases, electronic books, search strategies, citation, copyright, and plagiarism.

**LIT 1 — Early American Literature** 3 Units
(CAN ENGL14) Degree Appropriate, CSU, UC
Prerequisite: ENGL 1A
American literature of the seventeenth, eighteenth, and nineteenth centuries. Emphasizes writers who created an American literary identity and shaped America’s cultural mythology.

**LIT 2 — Modern American Literature** 3 Units
(CAN ENGL16) Degree Appropriate, CSU, UC
Prerequisite: ENGL 1A
Emphasizes characteristic 20th century concerns such as identity and cultural diversity, the American Dream, the effects of industrial and technological development, human isolation and alienation, and examines the impact of these concerns on American literary form and on America’s cultural mythology.

**LIT 3 — Multicultural American Literature** 3 Units
54.00 hours lecture.
Degree Appropriate, CSU
Prerequisite: Eligibility for ENGL 1A
Analyzes the representative contributions of three or four diverse groups to American literature and culture. Covering a wide spectrum of historical periods and literary genres, the course will focus on issues of ethnic identity, assimilation, acculturation, cultural pluralism, and family and gender roles in order to heighten awareness of diversity in America. Representative literature groups may include African American, Hispanic American, Native American, Asian American, Gay and Lesbian American, disability groups and religious groups.

**LIT 6A — Survey of English Literature** 3 Units
54.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: ENGL 1A
A chronological study of major works from Beowulf and the Anglo-Saxon period to the mid-18th century.

**LIT 6B — Survey of English Literature** 3 Units
Degree Appropriate, CSU, UC
Prerequisite: ENGL 1A
A chronological study of major works from the Romantic Era through the Victorian and Modern periods to contemporary texts.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
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<tbody>
<tr>
<td>LIT 10</td>
<td>Survey of Shakespeare</td>
<td>3</td>
<td>A survey of Shakespeare's histories, tragedies, comedies, and selected sonnets with their historical and literary context, emphasizing their relevance to contemporary culture and values.</td>
</tr>
<tr>
<td>LIT 11A</td>
<td>World Literature</td>
<td>3</td>
<td>Works and ideas from classical Greece through the Renaissance, emphasizing those works which not only reflect qualities of universal greatness but also the thought and spirit of the ages in which they were written. Emphasizes how art, society, politics, philosophies and general culture are interrelated and reflected in the literature of these different eras.</td>
</tr>
<tr>
<td>LIT 11B</td>
<td>World Literature</td>
<td>3</td>
<td>An introductory survey course of European literature (17th to the 20th centuries) that explores the significant and representative literary works of the major authors of these periods. Emphasis on the aesthetic, social and philosophical values and ideas that influenced these authors and the development of 20th century thought.</td>
</tr>
<tr>
<td>LIT 14</td>
<td>Introduction to Modern Poetry</td>
<td>3</td>
<td>Examines the significant poetry of England and America in the 20th century, with the major emphasis on contemporary poems.</td>
</tr>
<tr>
<td>LIT 15</td>
<td>Introduction to Cinema</td>
<td>3</td>
<td>Explores the broad range of human experience inherent in the study of film as art. Using a number of films drawn from various genres, examines film from historical, social, technological and aesthetic perspectives.</td>
</tr>
<tr>
<td>LIT 20</td>
<td>African American Literature</td>
<td>3</td>
<td>Surveys 18th, 19th and 20th century writings of African Americans. Emphasizes the oral tradition, development of protest literature and major modern and contemporary writers such as Wright, Ellison, Baldwin, Walker, and Morrison.</td>
</tr>
<tr>
<td>LIT 25</td>
<td>Contemporary Mexican American Literature</td>
<td>3</td>
<td>Issues of contemporary Mexican-American literature, drama, and film. Includes discussion of the roles played by gender, religion, language, education, family, ethnic identity, and class. Also addresses application of literary tools such as symbolism, language, and theme.</td>
</tr>
<tr>
<td>LIT 33</td>
<td>Images of Women in Literature</td>
<td>3</td>
<td>Survey of selected pieces of literature, poetry, short stories and novels which reflect significant ideas and attitudes about women. The Women's Rights Movement will also be explored through an intensive examination of the changing images of women in society as portrayed by both male and female authors. Some contemporary critical material will be used.</td>
</tr>
<tr>
<td>LIT 35</td>
<td>Science Fiction and Fantasy Survey</td>
<td>3</td>
<td>A chronological survey of science (or speculative) fiction and fantasy from earliest classics to the present day. Examines early attempts by Aristophanes, Swift, and the &quot;fathers&quot; – H.G. Wells and Verne. Will emphasize contemporary writers such as Bradbury, Heinlein, Vonnegut, Ellison, Sturgeon, Asimov, and Clarke. Definitions and quality standards will be evolved.</td>
</tr>
<tr>
<td>LIT 40</td>
<td>Children's Literature</td>
<td>3</td>
<td>Designed to give the student a knowledge and an appreciation of children's books, both fiction and non-fiction, from around the world. Special emphasis is given to analysis and interpretation of thematic and literary elements, suitability for age group, quality of writing and illustration, award-winning books, and issues related to cultural patterns, bias and persuasiveness.</td>
</tr>
<tr>
<td>LIT 46</td>
<td>The Bible As Literature: Old Testament</td>
<td>3</td>
<td>Considers the Bible as a collection of literary texts and applies the principles of literary historical analysis to selected books of the Old Testament.</td>
</tr>
<tr>
<td>MFG 12</td>
<td>Manufacturing Processes II</td>
<td>2</td>
<td>The study of manufacturing equipment and manufacturing processes. Theory and practice in milling operations, tooling setup, metallurgy, heat treatment, precision grinding, and basic tool design. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>MFG 15</td>
<td>AutoCAD 2D</td>
<td>2</td>
<td>Development of two dimensional AutoCAD mechanical screen drawings, as related to Computer Integrated Manufacturing (CIM), and Computer Aided Machines (CAM). Completed drawings will be translated into DXF and/or IGES files and then transferred to various CAD/CAM systems. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
Course Descriptions

MFG 17 — 3-D CAD - Mechanical Modeling 2 Units
(May be taken four times for credit.) Degree Appropriate
18.00 hours lecture.
54.00 hours lab.
Advisory: MFG 15
Development of three dimensional mechanical models using AutoCAD. Analysis and manipulation of mechanical solid models and industrial primitives as related to their interaction with Computer Aided Machines (CAM) and Computer Integrated Manufacturing (CIM) systems. Students who repeat this course will improve skills through further instruction and practice.

MFG 19 — Parametric Solid Modeling for Manufacturing 2 Units
(May be taken four times for credit.) Degree Appropriate
18.00 hours lecture.
54.00 hours lab.
Advisory: MFG 17
Development of feature-based solid modeling on a computer using current software used in industry. Transfer of solid model to a CAM system for CNC code production. Includes production of a manufactured part using CNC mill. Students who repeat this course will improve skills through further instruction and practice.

MFG 25 — Advanced Parametric Solid Modeling for Manufacturing 2 Units
(May be taken four times for credit.) Degree Appropriate
18.00 hours lecture.
54.00 hours lab.
Advisory: MFG 19 or MFG 27 taken previously
Advanced instruction in concepts, practice, and development of feature-based solid modeling using current software currently used in the manufacturing industry. Advanced features of solid modeling global variables, 3-D helical paths generation, surface cut, table-driven parts, and advanced sheet metal, and animation. Students who repeat this course will improve skills through further instruction and practice.

MFG 27 — Autodesk Inventor 2 Units
(May be taken four times for credit.) Degree Appropriate
18.00 hours lecture.
54.00 hours lab.
Advisory: MFG 19
Advanced concepts, practice, and development of feature-based solid modeling using Autodesk Inventor. Solid modeling parts creation using sketched, placed, and work features. Assembly techniques, working drawings, and the transfer of a solid model to a CAM system. Students who repeat this course will improve skills through further instruction and practice.

MFG 30 — MasterCAM I 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
18.00 hours lecture.
54.00 hours lab.
Use MasterCAM software to create wire-frame part geometry, add tool paths and create CNC code for CNC mills and CNC lathes. Students who repeat this course will improve skills through further instruction and practice.

MFG 38 — MasterCAM II 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
18.00 hours lecture.
54.00 hours lab.
Use MasterCAM software to create wire-frame 3D/multi-axis part geometry, add tool paths, and create CNC code for CNC mills and CNC lathes. Students who repeat this course will improve skills through further instruction and practice.

MFG 39 — SurfCAM I 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
18.00 hours lecture.
54.00 hours lab.
Advisory: MFG 38
SurfCAM software used to create part geometry from project drawings for two-axis milling and turning parts. Tool paths will be added and files completed and post-processed. Files will be downloaded to CNC machines. Students will be required to set up all cutting tools and machine the part. Students who repeat this course will improve skills through further instruction and practice.

MFG 39B — SurfCAM II 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
18.00 hours lecture.
54.00 hours lab.
Advisory: MFG 39
Use SurfCAM software to create part geometry for three-axis milling and lathe parts from project drawings and CAD files. Tool paths will be added and the completed file will be post-processed and downloaded to CNC machines. Students will setup the required cutting tools and machine the part. Students who repeat this course will improve skills through further instruction and practice.

MFG 50 — Blueprint Reading for Manufacturing 2 Units
(May be taken two times for credit.) Degree Appropriate
36.00 hours lecture.
Advisory: MFG 70
Blueprint reading as a means of interpreting and visualizing drawings used in manufacturing. Includes the basic print form, title block, notes, materials, machining specifications, application of principles to CNC, welding, and sheet metal. Students who repeat this course will improve skills through further instruction and practice.

MFG 58 — Blueprint Reading for Manufacturing .5 Unit
(May be taken four times for credit.) Non-Degree Credit
4.50 hours lecture.
13.50 hours lab.
Provides students with the opportunity to develop skills in specific machining areas. Content of each course and the methods of study will depend on the specific machining skills selected.
### MATH 50 — Pre-Algebra 3 Units
54.00 hours lecture.  
Pre-Collegiate  
Prerequisite: Credit in LERN 49 or qualifying score on current department placement test  
Fundamental principles of mathematics designed to ease the transition from arithmetic to algebra. Concepts, computational thinking, skills, thinking and problem-solving skills are balanced to build proficiency and mastery.

### MATH 51A — Elementary Algebra - First Half 3 Units
54.00 hours lecture.  
Degree Appropriate  
Prerequisite: MATH 50 or qualifying score on current department placement test  
Contains the first half of elementary algebra. Operations with signed numbers and algebraic expressions; linear equations and inequalities; polynomial operations and factoring; rational expressions and equations; ratios, proportions, formulas, and variation; applications.

### MATH 51B — Elementary Algebra - Second Half 3 Units
54.00 hours lecture.  
Degree Appropriate  
Prerequisite: MATH 51A  
Contains the second half of Elementary Algebra. Includes: Cartesian Coordinate System, slope(graphing/equations of lines, solving systems of linear equations, algebraic operations with radicals, solving equations with radicals, solving second degree equations using methods of completing the square and the quadratic formula. Students must complete both MATH 51A and MATH 51B to have taken the equivalent of Elementary Algebra (MATH 51).

### MATH 61 — Plane Geometry 3 Units
54.00 hours lecture.  
Pre-Collegiate  
Prerequisite: Credit in LERN 49 or qualifying score on current department placement test  
Points, lines, polygons and circles; their relationships to each other on plane surfaces; congruence, similarity and area. Introduction to inductive, deductive and indirect reasoning. The formal proof is introduced and practiced throughout the course. Stress is placed on accuracy of statement as a background for analytical and scientific reasoning.

### MATH 71 — Intermediate Algebra 5 Units
90.00 hours lecture.  
Degree Appropriate  
Prerequisite: MATH 51A or MATH 51B or MATH 52 or qualifying score on current department placement test  
Reviews and extends concepts from elementary algebra, and introduces new content to prepare students for a variety of subsequent mathematics courses. Polynomial, rational, radical, exponential and logarithmic expressions are simplified, equations solved and functions graphed and studied; linear and nonlinear systems of equations and inequalities; conic sections; sequence, series and the binomial theorem. Application problems appear throughout the course.

### MATH 71A — Intermediate Algebra - First Half 3 Units
54.00 hours lecture.  
Degree Appropriate  
Prerequisite: MATH 51A or MATH 51B or qualifying score on current department placement test  
Algebra of functions, polynomials, and rational expressions; functions and their graphs; systems of equations with two or three variables; absolute value and compound inequalities. Covers some MATH 71 topics at a slower pace. A student must complete both MATH 71A and 71B to have taken the equivalent of MATH 71, Intermediate Algebra.

### MATH 71B — Intermediate Algebra - Second Half 3 Units
54.00 hours lecture.  
Degree Appropriate  
Prerequisite: MATH 71A  
Quadratic equations and graphs; exponents, radicals and logarithms; conic sections. Covers remaining MATH 71 topics at a slower pace. A student must complete both MATH 71A AND 71B to have taken the equivalent of MATH 71, Intermediate Algebra.

### MATH 96 — Strategies for Math Success 1 Unit  
(May be taken three times for credit.)  
Pre-Collegiate  
(May be taken for Credit/No Credit only.)  
18.00 hours lecture.  
Perspectives, understandings and strategies to utilize a learning system for acquiring, understanding, remembering and producing mathematical knowledge. Course is appropriate for all levels of mathematics students. Students who repeat this course will improve skill through further instruction and practice.

### MATH 99 — Special Projects in Mathematics 2 Units  
(May be taken four times for credit.)  
Degree Appropriate, CSU  
36.00 hours lecture.  
In order to offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students who repeat this course will improve skills through further instruction and practice.

### MATH 100 — Survey of College Mathematics 3 Units  
(CAN MATH 2)  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
Prerequisite: (MATH 71 or MATH 71B or MATH 72 or qualifying score on current department placement test) AND (MATH 61 or two semesters of high school geometry, "C" or better, or passing score on current geometry competency test)  
Introduction to mathematical methods and reasoning. Topics include: set theory, logic, counting methods, probability and statistics, with additional topics selected from numeration and mathematical systems, number theory, geometry, graph theory and mathematical modeling.

### MATH 110 — Elementary Statistics 3 Units  
(CAN STAT 2)  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
Prerequisite: MATH 71 or MATH 71B or MATH 72 or qualifying score on current department placement test  
Emphasis is placed on the understanding of statistical methods. Descriptive analysis of sample statistics, distribution of discrete and continuous random variables, estimation theory, tests of hypotheses, regression, correlation and analysis of variance.
Course Descriptions

MATH 110 — Elementary Statistics - Honors 3 Units
(CAN STAT 2) Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: (MATH 71 or MATH 71B or MATH 72 or qualifying passing score on current department placement test) AND acceptance into the Honors Program.
Emphasis is placed on understanding of statistical methods. Descriptive analysis of sample statistics, distribution of discrete and continuous random variables, estimation theory, tests of hypotheses, regression, correlation, and analysis of variance. An honors course designed to provide an enriched experience. Students may not receive credit for both MATH 110 and MATH 110H.

MATH 120 — Finite Mathematics 3 Units
Fall Semester Degree Appropriate, CSU, UC
54.00 hours lecture.
Prerequisite: MATH 71 or MATH 71B or MATH 72 or qualifying score on current department placement test
Mathematics for business, social science and biological science majors. Topics include linear programming, matrix theory, probability, statistics, stochastic processes, Markov chains, and math of finance.

MATH 130 — College Algebra 3 Units
54.00 hours lecture.
Prerequisite: MATH 71 or MATH 71B or MATH 72 or qualifying score on current department placement test
A college-level course in algebra. A study of real numbers and sets, algebraic functions and relations, radicals and exponents, linear and quadratic equations, complex numbers, matrices, systems of linear equations, polynomial and other functions, exponential and logarithmic functions, conics, series, and binomial formula.

MATH 140 — Calculus for Business 4 Units
72.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: MATH 130 or MATH 160 or qualifying score on current department placement test
Calculus for business, social science, and non-science majors. Algebraic, exponential, and logarithmic functions; limits; differentiation with applications; graphs; various techniques of integration with applications; differential equations; multi variable calculus. Credit not given to persons with credit in MATH 180 or equivalent.

MATH 150 — Trigonometry 3 Units
54.00 hours lecture.
Degree Appropriate, CSU
Prerequisite: MATH 71 or MATH 71B or MATH 72 or qualifying score on current department placement test AND MATH 61 or two semesters of high school geometry with "C" or better, or passing score on current geometry competency test.
Trigonometric functions and inverse trigonometric functions and the graphical representations of these functions; solutions to right and oblique triangles with laws of sines and cosines; vectors; solutions to trigonometric equations; identities; polar coordinates; complex numbers and DeMoivre's Theorem.

MATH 160 — Precalculus Mathematics 4 Units
72.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: MATH 150 OR (high school trigonometry, "C" or better, and a qualifying score on current department placement test)
Prepare students for the calculus sequence. Real-valued functions, including algebraic, trigonometric, exponential, and logarithmic functions. Also includes proofs, inequalities, introductory analytical geometry, series, sequences, and vectors.

MATH 180 — Calculus and Analytic Geometry 4 Units
72.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: MATH 160 or qualifying score on current department placement test
Functions, curve sketching, limits, the derivative, rules for differentiation of algebraic and trigonometric functions, applications of the derivative. Indefinite and definite integrals, and calculus with exponential, logarithmic, and other transcendental functions.

MATH 181 — Calculus and Analytic Geometry 5 Units
72.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: MATH 180
Applications of integration, techniques of integration; numerical integration; indeterminate forms and improper integrals; infinite series; plane curves and parametric equations; vectors in two and three space and their applications.

MATH 210 — Concepts of Elementary Mathematics 3 Units
54.00 hours lecture.
Degree Appropriate, CSU
Prerequisite: MATH 100
Structure and theory of the mathematics that constitute the core of K-8 mathematics curriculum. Concepts include the essential elements of a number system; fundamental understanding of operations upon whole numbers, rational numbers and integers; higher-order critical thinking skills and strategies in the area of problem solving.

MATH 245 — A Transition to Advanced Mathematics 3 Units
54.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: MATH 181
A transition to the rigorous of upper-division mathematics courses. Basic set theory and logic, relations, functions, mathematical induction, the well-ordering principle, countable and uncountable sets, the Schroder-Bernstein Theorem, the axiom of choice, Zorn's Lemma, the Heine-Borel Theorem, the Bolzano-Weierstrass Theorem. Special emphasis on how to present and understand mathematical proofs.

MATH 280 — Calculus and Analytic Geometry 4 Units
72.00 hours lecture.
Degree Appropriate, CSU, UC
Prerequisite: MATH 181
Analysis of vector-valued functions of several variables, partial derivatives, differentials, the chain rule, directional derivatives and the gradient. Extrema of functions of several variables with applications. Double and triple integrals in various coordinate systems with applications. Vector fields, line integrals, work, independence of path in conservative fields. Green's Theorem, surface integrals, flux, divergence and curl, Stokes' Theorem, the Divergence Theorem.

MATH 285 — Linear Algebra and Differential Equations 5 Units
90.00 hours lecture.
Prerequisite: MATH 280
First order ordinary differential equations, including separable, linear, homogeneous of degree zero, Bernoulli and exact with applications and numerical methods. Solutions to higher order differential equations using undetermined coefficients, variation of parameters, and power series, with applications. Solutions to linear and non-linear systems of differential equations, including numerical solutions. Matrix algebra, solutions of linear systems of equations, and determinants. Vector spaces, linear independence, basis and dimension, subspace and inner product space, including the Gram-Schmidt procedure. Linear transformations, kernel and range, eigenvalues, eigenvectors, diagonalization and symmetric matrices.

MEDICAL TERMINOLOGY

MENT 40 — Introduction to Interviewing and Counseling 3 Units
54.00 hours lecture.
Degree Appropriate
Introduction to the use and meaning of the medical terminology used in various allied health fields. Relates to other allied health fields and can apply to secretarial science majors.

MENTAL HEALTH/PSYCHIATRIC TECHNICIAN

MENT 90 — Medical Terminology 3 Units
54.00 hours lecture.
Degree Appropriate
Introduction to medical terminology used in various allied health fields. Designed for secretarial science majors.
M ENT 56L — Clinical Experience 4 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
216.00 hours lab.
Corequisite: MENT 56
Development of medical-surgical nursing skills. Application and assessment, intervention, evaluation of nursing care in the physiological modes of rest and exercise, regulation, nutrition, elimination, application of emergency procedures, circulation, ventilation, and sensory system. Application of nursing skills to medical surgical patients, including neoplasms and cardiovascular problems. Administration of medication.

M ENT 58D — Advanced Medical-Surgical Nursing and Pharmacology for PT 4 Units
72.00 hours lecture. Degree Appropriate
Prerequisite: MENT 56, MENT 56L
Corequisite: MENT 58L
Examines disease processes affecting body systems, etiology, required nursing care; study of drugs, standards, administration, dose calculations.

M ENT 58L — Advanced Medical-Surgical Nursing for Psychiatric Technicians Clinical 1.5 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
90.00 hours lab.
Application of nursing skills to patients with medical/surgical disorders. Administration of medications.

M ENT 70 — Introduction to Psychiatric Technology 1.5 Units
27.00 hours lecture. Degree Appropriate
Prerequisite: Admission to Psychiatric Technician Program
Corequisite: MENT 70L
Role and function of the Psychiatric Technician; mental health theories of personality development, self-concept, role function, and interdependence; developmental disabilities theories of sensorimotor techniques, behavior modification techniques.

M ENT 70L — Introduction to Psychiatric Technology Clinical Technicians 2 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
108.00 hours lab.
Corequisite: MENT 70
The clinical experience introduces the student to facilities within the community which serve the mental health field including both the mentally disordered and developmentally disabled.

M ENT 72 — Nursing Care of the Developmentally Disabled Person 7 Units
126.00 hours lecture. Degree Appropriate
Prerequisite: MENT 56, MENT 70
Corequisite: MENT 72L
Etiology of mental retardation; develops the knowledge, skills, and attitudes necessary to safely teach and train the developmentally disabled person. Techniques of behavior modification and sensory-motor training are used, as well as the teaching of self-help skills. Examines normal development from infancy to the aged.

M ENT 72L — Nursing Care of the Developmentally Disabled Person - Clinical 5 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
208.00 hours lab.
Corequisite: MENT 72
Application of skills needed to teach, train, and provide care for the developmentally disabled person. Administration of medication.

M ENT 73L — Psychiatric Nursing for Psychiatric Technicians Clinical 5 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
288.00 hours lab.
Corequisite: MENT 73T
Clinical instruction in the treatment of mental disabilities and substance abuse.

M ENT 73T — Psychiatric Nursing for Psychiatric Technicians 6 Units
108.00 hours lecture. Degree Appropriate
Corequisite: MENT 73L
Theoretical instruction in the assessment and treatment of the mentally disabled, use of common medication, therapeutic communication, assertive language and leadership skills appropriate for the practicing Psychiatric Technician.

M ENT 82 — Work Experience in Mental Health Technology 2 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
150.00 hours lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog, MENT 72, MENT 73T
Provides majors with actual on-the-job experience in an approved work station related to classroom instruction. A minimum of 60 non-paid or 75 paid clock hours per semester is required for each unit of credit. It is recommended that the hour per week be equally distributed throughout the semester. Veterans may not use work experience courses as credit towards veterans benefits.

MICR 1 — Principles of Microbiology 5 Units
(CAN BIOL14) Degree Appropriate, CSU, UC
54.00 hours lecture. Degree Appropriate
108.00 hours lab.
Prerequisite: CHEM 10 or CHEM 40 or one year of high school chemistry (C or better)
Fundamental concepts of microbiology; beneficial and pathological aspects; growth and control of microbes; virology, immunology, and host-microbe interactions. Important infectious diseases of humans are surveyed. Laboratory exercises include culturing, examining, and identifying microorganisms.

MICR 22 — Microbiology 4 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Prerequisite: CHEM 10 or CHEM 40 or one year of high school chemistry (C or better)
Fundamental concepts of microbiology; viruses, bacteria, fungi, protozoa and parasitic worms.

MUS 1 — Concert Music 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
18.00 hours lecture.
(May be taken for Credit/No Credit only.) Degree Appropriate
Cluster repeatability: Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.
Cluster: MUS 99A, MUS 99B, MUS 99C

MUS 2 — Music Theory 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Corequisite: MUS 5A
Study of harmony and form in Western tonal music. Explores the concept of sonata, the properties of melody, basic chord grammar and the mechanisms by which music projects meaning. Includes a comprehensive review of music fundamentals, including music notation, meter, scales, intervals and chord construction. Required for music majors.
MUS 3A — Harmony 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: MUS 2, MUS 5A
Corequisite: MUS 3B
An examination of the harmonic style of Western tonal music from the common practice period. Topics include elementary chord syntax, the principles of voice leading, simple figured bass realization, sopranino, subdominant, basic non-chord tones, seventh chords, basic modulation techniques, period forms and binaries. Students will compose original music in the harmonic and melodic style of Classical models.

MUS 3B — Harmony 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: MUS 3A, MUS 5B
Corequisite: MUS 6A
Further examination of the harmonic style of Western tonal music from the common practice period, with emphasis on the contrapuntal music of the Baroque Era. Topics include secondary function chords, advanced non-chord tones, advanced figured bass realization, harmonic sequences, modified species, 18th century counterpoint and imitative contrapuntal forms. Students will write analysis papers and compose original music in the harmonic and melodic style of Baroque models.

MUS 3C — Harmony 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: MUS 3B, MUS 6A
Corequisite: MUS 6B
Further examination of the harmonic style of Western tonal music from the common practice period, with emphasis on 18th and 19th century repertoire. Topics include modal mixture, chromatic realization, extended tonicization, advanced modulation techniques, lieder, rondo and sonata form. Students will write analysis papers and compose original music in the harmonic and melodic style of Romantic models.

MUS 5A — Musicianship - Ear Training and Sight Singing 1 Unit
18.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: MUS 2, MUS 5A
Corequisite: MUS 3A
Required for music majors. Emphasizes singing, aural perception and dictation with emphasis on rhythm, melody, intervals, and simple harmonic progressions. Students will be aided by the use of a computer lab, and documented lab time outside of class will be required for successful course completion.

MUS 5B — Musicianship - Ear Training and Sight Singing 1 Unit
18.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: MUS 2, MUS 5A
Corequisite: MUS 3A
Provides further training in sight singing, aural perception and dictation, including soprano-bass dictation of diatonic Bach-style chorales. Students will be aided by the use of a computer lab, and documented lab time outside of class will be required for successful course completion.

MUS 6A — Musicianship - Advanced 2 Units
36.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: MUS 3A
Corequisite: MUS 3B
Advanced training in sight singing, aural perception and dictation, including soprano-bass dictation of modulating Bach-style chorales and imitative counterpoint. Students will be aided by the use of a computer lab, and documented lab time outside of class will be required for successful course completion.

MUS 6B — Musicianship - Advanced 2 Units
36.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: MUS 3B, MUS 6A
Corequisite: MUS 3C
Provides further training in sight singing, aural perception and dictation, including soprano-bass dictation of chromatic chord progressions and aural dictation of decorated instrumental textures. Students will be aided by the use of a computer lab, and documented lab time outside of class will be required for successful course completion.

MUS 7 — Fundamentals of Music 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Non-music major course dealing with basic elements of music notation, melody, rhythm, and harmony. Written exercises utilizing the techniques of melody, rhythm, and harmony will be employed. Recommended for prospective elementary school teachers.

MUS 9 — Introduction to Music Technology 3 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
An introductory study of music from a variety of cultures including a survey of western music from the Medieval period through the 18th century. Lectures are augmented by recordings and other support media pertinent to the culture/period being studied. Attending at least one live concert is required.

MUS 10 — Fundamentals of Music 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Provides an introduction to the basic elements of music notation, melody, rhythm, and harmony. Written exercises utilizing the techniques of melody, rhythm, and harmony will be employed. Recommended for prospective elementary school teachers.

MUS 11A — Music Literature Survey 3 Units
Fall Semester Degree Appropriate, CSU, UC
A survey of the uses of computers and electronic devices to capture, create, modify and disseminate music. Provides an introduction to the principles of musical acoustics, sound recording, and digital audio. Computer software for MIDI sequencing, sound synthesis, digital sampling, editing, music notation, and composition will be demonstrated and practiced in class. Assignments will include the creation of original music. Students who repeat this course will improve skills through further instruction and practice.

MUS 11B — Music Literature Survey 3 Units
Spring Semester Degree Appropriate, CSU, UC
A survey of western music from the 18th to the early 21st century including examples from several non-western cultures that have influenced music of those style periods. Lectures are augmented by recordings and other support media pertinent to the culture/period being studied. Attending at least one live concert is required.

MUS 12 — History of Jazz 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
An introductory study of music from a variety of cultures including a survey of western music from the Medieval period through the 18th century. Lectures are augmented by recordings and other support media pertinent to the culture/period being studied. Attending at least one live concert is required.

MUS 13 — Introduction to Music Appreciation 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
An introductory study of music from a variety of cultures including a survey of western music from the Medieval period through the 21st century. Lectures are augmented by recordings and other support media pertinent to the culture/period being studied. Attending at least one live concert is required.
Musical experience is required. Further instruction and practice will improve skills through further instruction and practice. No prior musical experience is required. The study of American folk music by both region and period. Instruction will include lecture, reading, and listening assignments, and various audio-visual materials. No previous musical experience required.

MUS 15 — Rock Music History and Appreciation 3 Units
(May be taken for option of letter grade or Credit/No Credit.)

Historical survey of rock music from its beginnings in the early 50’s to the present. Rhythm & Blues, Rockabilly, the British Invasion, Motown, Soul, Folk Rock, Hard Rock, Punk, Heavy Metal, and various Alternative Rock styles will be discussed. Personalities and musical styles will be related to the sociology of the time period being studied.

MUS 16 — Individual Instruction 3 Units
(CAN MUS 14) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)

18.00 hours lecture.
18.00 hours lab.

Prerequisite: Admission by audition
A course in applied music for students also enrolled in a major performing group. Instruction includes a private one-half hour lesson plus five and one-half hours of laboratory practice per week. Individual problems of performance techniques, interpretation, and repertoire are included. Students who repeat this course will improve skills through further instruction and practice.

MUS 17A — Elementary Class Piano 1 Unit
(CAN MUS 22) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)

Advisory: MUS 17B

18.00 hours lecture.
18.00 hours lab.

Reading and performance of piano literature with emphasis on scales, chord progressions, and sight reading. Students who repeat this course will improve skills through further instruction and practice. No prior musical experience is required.

MUS 17B — Intermediate Class Piano 1 Unit
(CAN MUS 24) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)

Advisory: MUS 17A or professor approval

18.00 hours lecture.
18.00 hours lab.

Reading and performance of piano literature with further emphasis on scales, chord progressions, and sight reading. Students who repeat this course will improve skills through further instruction and practice.

MUS 18 — Advanced Class Piano 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
18.00 hours lecture.
18.00 hours lab.

Advisory: MUS 17B

The style, technique and interpretation of piano music from the 17th century to the present is studied collectively and individually. Sight reading, improvisation and ensemble playing will be emphasized. Students who repeat this course will improve skills through further instruction and practice. Recommended for music majors.

MUS 19 — Class Organ 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
18.00 hours lecture.
18.00 hours lab.

Advisory: MUS 17A and MUS 17B or equivalent

Group and individual instruction in registration, manual/pedal technique, and interpretation of standard organ literature. Students who repeat this course will improve skills through further instruction and practice.

MUS 20A — Elementary Class Voice 1 Unit
(May be taken two times for credit.) Degree Appropriate, CSU, UC
18.00 hours lecture.
18.00 hours lab.

Group instruction on the basics of singing with special emphasis on breath control and its importance in the singing of the musical line. English and American songs will be studied. Open to non-music majors and recommended for all music majors. Students who repeat this course will improve skills through further instruction and practice.

MUS 20B — Intermediate Class Voice 1 Unit
(May be taken two times for credit.) Degree Appropriate, CSU, UC
18.00 hours lecture.
18.00 hours lab.

Group instruction on the basics of singing with special emphasis on breath control and its importance in the singing of the musical line. English and American songs will be studied. Open to non-music majors and recommended for all music majors. Students who repeat this course will improve skills through further instruction and practice.

MUS 21 — Advanced Class Voice 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
18.00 hours lecture.
18.00 hours lab.

Advisory: MUS 2 or MUS 7 and/or audition by professor

Group and individual study of the style, techniques, and interpretation of art songs and songs from operas and musicals. Emphasis will be placed on diction and pronunciation of foreign languages. Students who repeat this course will improve skills through further instruction and practice.

MUS 22 — Conducting 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)

18.00 hours lecture.
18.00 hours lab.

Teaches and practices basic beat patterns, score reading, and rehearsal techniques. Offers an opportunity to learn and apply the techniques needed for group direction and leadership. Students who repeat this course will improve skills through further instruction and practice.

MUS 23A — Elementary Class Guitar 1 Unit
(May be taken two times for credit.) Degree Appropriate, CSU, UC
18.00 hours lecture.
18.00 hours lab.

Acoustic guitar playing, note reading, strumming, finger picking and improvisation. Students must furnish their own guitars. Students who repeat this course will improve skills through further instruction and practice.

MUS 23B — Intermediate Class Guitar 1 Unit
(May be taken two times for credit.) Degree Appropriate, CSU, UC
18.00 hours lecture.
18.00 hours lab.

Techniques for reading and playing music arranged for the solo guitar. Students must furnish their own acoustic guitar. Students who repeat this course will improve skills through further instruction and practice.

MUS 24 — Advanced Class Guitar 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)

18.00 hours lecture.
18.00 hours lab.

Advisory: MUS 23A

The style, technique, and interpretation of guitar music of the 18th and 19th centuries will be studied and performed. Sight reading and ensemble playing will be emphasized. Students must furnish their own acoustic guitar. Students who repeat this course will improve skills through further instruction and practice.

MUS 25A — Jazz Improvisation 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)

18.00 hours lecture.
18.00 hours lab.

Advisory: MUS 2 or MUS 7 and/or audition by professor

Styles and techniques of improvisation. Each student must furnish his/her own instrument and be able to perform individually and with the class. Students who repeat this course will improve skills through further instruction and practice.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
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<tbody>
<tr>
<td>MUS 25B</td>
<td>Jazz Improvisation</td>
<td>1</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 18.00 hours lecture.</td>
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<td>18.00 hours lab.</td>
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<td>Advisory: MUS 2 or MUS 7 and/or audition by professor AND MUS 25A or equivalent experience.</td>
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<td></td>
<td>Styles and techniques of improvisation. Each student must furnish his/her own instrument and be</td>
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<td>able to perform individually and with the class. Augments and supplements MUS 25A. Students who</td>
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<td>repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>MUS 27</td>
<td>Chamber Winds</td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 108.00 hours lab.</td>
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<td>Corequisite: Admission by audition; MUS 49</td>
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<td>This select ensemble of wind instruments will study and perform small ensemble music by major</td>
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<td>composers. Includes brass and woodwind quintets and ensembles for families of instruments.</td>
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<td>Attendance is required at all public performances. Students who repeat this course will improve</td>
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<td>skills through further instruction and practice.</td>
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<tr>
<td>MUS 29</td>
<td>Choral Workshop</td>
<td>1</td>
<td>Summer Semester Degree Appropriate, CSU, UC 54.00 hours lab.</td>
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<td>(May be taken four times for credit.)</td>
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<td>Open to all students without an audition. Choral music of all genres with an emphasis on</td>
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<td>strengthening choral skills, including sight singing, tone, blend, balance and good vocal</td>
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<td>technique. Covers choral tone of the Renaissance to correct use of the microphone when</td>
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<td>singing pop or vocal jazz. Several guest conductors from local universities will provide</td>
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<td>clinics. Students who repeat this course will improve skills through further instruction and</td>
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<td>practice.</td>
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<tr>
<td>MUS 30</td>
<td>Collegiate Chorale</td>
<td>1</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 54.00 hours lab.</td>
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<td>A non-auditioned mixed choral ensemble open to all students. A variety of mixed choral</td>
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<td>repertoire will be studied and performed, from music of the Renaissance to contemporary</td>
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<td>Pop, Broadway, and Vocal Jazz. Rehearsal time will also be devoted to vocal development and</td>
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<td>improving music theory skills. Students who repeat this course will improve skills through</td>
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<td>further instruction and practice.</td>
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<tr>
<td>MUS 31</td>
<td>Concert Choir</td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 108.00 hours lab.</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td>A mixed choral ensemble in which students perform a variety of major choral works. Classical</td>
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<td>songs are rehearsed in class and performed for a public audience. Sight singing skills and</td>
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<td>proper vocal technique are emphasized. Voice placement auditions are held the first week of</td>
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<td>class. Attendance at all performances is required. Students who repeat this course will</td>
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<td>improve their skills through further instruction and practice.</td>
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<tr>
<td>MUS 32</td>
<td>Masterworks Chorale</td>
<td>1</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 54.00 hours lab.</td>
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<td>Prerequisite: Admission by audition during the first week of class</td>
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<td>This soprano, alto, tenor, bass choir will perform major choral works ranging from the Baroque</td>
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<td>era to the 20th century. In addition to preparation and performance of quality choral</td>
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<td>literature from all genres, time will be spent on vocal development and music theory. Students</td>
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<td>who repeat this course will improve their skills through further instruction, practice, and</td>
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<td>knowledge of varied repertoire.</td>
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<tr>
<td>MUS 34</td>
<td>Women's Vocal Ensemble</td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 108.00 hours lab.</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td>Prerequisite: Admission by audition during the first week of class</td>
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<td>This women's group will study and perform selected classical works, folk songs, spirituals,</td>
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<td>and popular compositions. Attendance is required at all public performances. Students who</td>
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<td>repeat this course will improve their skills through further instruction and practice.</td>
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<tr>
<td>MUS 36</td>
<td>Concert and Community Band</td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 108.00 hours lab.</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td>Advisory: Previous band experience</td>
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<td>Study and performance of standard and new band literature. Experience will be given to capable</td>
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<td>student directors, soloists, arrangers and composers. Attendance is required at all public</td>
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<td>performances. Students who repeat this course will improve skills through further instruction</td>
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<td>and practice.</td>
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<td>MUS 38</td>
<td>Ensemble</td>
<td>1</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 18.00 hours lecture.</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td>18.00 hours lab.</td>
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<td>Prerequisite: Ability to read music or admission by audition</td>
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<td>The study and performance of music written for small ensembles. Students who repeat this course</td>
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<td>will improve skills through further instruction and practice.</td>
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<tr>
<td>MUS 39</td>
<td>Laboratory Band</td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 108.00 hours lab.</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td>Study and performance of jazz and popular music of all types. Provides the necessary training</td>
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<td>and experience for MUS 47, Jazz Band, or for the improvement of jazz skills and understanding.</td>
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<td>Students who repeat this course will improve skills through further instruction and practice.</td>
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<td>MUS 40</td>
<td>Pep Band</td>
<td>1</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 54.00 hours lab.</td>
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<td>Prerequisite: Admission by audition</td>
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<td>Study and performance of standard and contemporary music for athletic and school spirit functions.</td>
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<td>Attendance is required at assigned public performances. Students who repeat this course will improve</td>
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<td>skills through further instruction and practice.</td>
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<td>MUS 44</td>
<td>Vocal Jazz Ensemble</td>
<td>3</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 162.00 hours lab.</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td>Prerequisite: Admission by audition</td>
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<td>A mixed vocal group, which includes a live rhythm section for accompaniment. Performance of vocal</td>
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<td>music in all jazz idioms. Performs for the public at festivals and at competitions. Scat</td>
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<td>improvisations and the study of jazz theory will be covered. Auditions are held the first</td>
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<td>week of classes. Students who repeat this course will improve skills through further instruction</td>
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<td>and practice.</td>
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<tr>
<td>MUS 45</td>
<td>Chamber Singers</td>
<td>3</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC 162.00 hours lab.</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td>Prerequisite: Admission by audition</td>
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<td>A highly select mixed choral group, specializing in smaller ensemble repertoire. A wide variety</td>
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<td>of choral literature is performed publicly several times each semester and a performance tour</td>
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<td>occurs each Spring semester. Emphasizes advanced musical skills and vocal techniques while</td>
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<td>focusing on the importance of blend, balance, and tone. Auditions for this course are held each</td>
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<td>May. Students who repeat this course will improve skills through further instruction and practice.</td>
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</table>
Students must have previous instrumental training and demonstrate Prerequisite: Admission by audition (May be taken four times for credit.) Degree Appropriate, CSU, UC through further instruction and practice. Performances. Students who repeat this course will improve skills through further instruction and practice.

MUS 46 — Mt. SAC Singers 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours lecture. 36.00 hours lab.
Prerequisite: Admission by audition The "Mt. SAC Singers" is a select choral ensemble, specializing in choreographed popular and musical theater literature. Includes a wide variety of music performed publicly several times every semester. Emphasizes advanced musical skills, vocal technique, choreography and showmanship skills. Students who repeat this course will improve skills through further instruction and practice.

MUS 47 — Jazz Band 3 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 162.00 hours lab.
Prerequisite: Audition may be required An instrumental ensemble dealing with all types of popular music and jazz. Preference will be given to performers playing more than one instrument. Students who repeat this course will improve skills through further instruction and practice.

MUS 48 — Men’s Vocal Ensemble 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 108.00 hours lab.
Prerequisite: Audition may be required The study and performance of selected classical works, folk songs, spirituals, and popular compositions. Attendance is required at all public performances. Students who repeat this course will improve skills through further instruction and practice.

MUS 49 — Wind Ensemble 3 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC Degree Appropriate, CSU, UC 162.00 hours lab.
Prerequisite: Admission by audition The premier classical wind and percussion ensemble at the College. Students must have previous instrumental training and demonstrate proficiency. Requires public performances. Concerts emphasize works of major composers, original compositions, and guest artists. Experience may be given to capable students as directors, soloists, arrangers, and composers. Students who repeat this course will improve skills through further instruction and practice.

MUS 99A — Special Projects in Music 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU Degree Appropriate, CSU 18.00 hours lecture. 18.00 hours lecture.
Offered to selected students in recognition of academic interests and abilities to give them the opportunity to explore these interests and abilities in greater depth. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have an instructor’s authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced. Projects must be approved in advance.

MUS 99B — Special Projects in Music 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU Degree Appropriate, CSU 36.00 hours lecture. 36.00 hours lecture.
Offered to selected students in recognition of academic interests and abilities to give them the opportunity to explore these interests and abilities in greater depth. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have an instructor’s authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced. Projects must be approved in advance.

MUS 99C — Special Projects in Music 3 Units
(May be taken four times for credit.) Degree Appropriate, CSU Degree Appropriate, CSU 108.00 hours lab. 108.00 hours lab.
Be approved in advance. The study and performance of selected classical works, folk songs, spirituals, and popular compositions. Attendance is required at all public performances. Students who repeat this course will improve skills through further instruction and practice.

MUS 99D — Special Projects in Music 4 Units
(May be taken four times for credit.) Degree Appropriate, CSU Degree Appropriate, CSU 162.00 hours lab. 162.00 hours lab.
Course must be approved in advance. The study and performance of selected classical works, folk songs, spirituals, and popular compositions. Attendance is required at all public performances. Students who repeat this course will improve skills through further instruction and practice.

NURS 1A — The Nursing Process I 4.75 Unit
45.00 hours lecture. Degree Appropriate, CSU Degree Appropriate, CSU 126.00 hours lab.
Prerequisite: Admission to Nursing Program; ANAT 35 or equivalent and ANAT 36 or equivalent, or ANAT 40A or equivalent and ANAT 40B or equivalent, or ANAT 40C or equivalent, or ANAT 40D or equivalent and ENGL 1A or equivalent Corequisite: NURS 2 The principles of nursing as related to a culturally diverse population, adulthood through senescence. Theory and application of the Nursing Process including meaning of illness, promoting health patterns, hygiene, safety, asepsis, medication administration, elimination, communication. The Betty Neuman Model serves as the conceptual framework.

NURS 1B — The Nursing Process II 4.75 Unit
45.00 hours lecture. Degree Appropriate, CSU Degree Appropriate, CSU 126.00 hours lab.
Prerequisite: NURS 1A or Advanced Placement Corequisite: NURS 2 Principles of nursing as related to culturally diverse population, adulthood through senescence. Theory and application of the Nursing Process including wound care, legal/ethical aspects, comfort, fluid and electrolytes, spirituality, and nursing trends. The Betty Neuman Model serves as the conceptual framework.

NURS 1A — The Nursing Process I 4.75 Unit
45.00 hours lecture. Degree Appropriate, CSU Degree Appropriate, CSU 126.00 hours lab.
Prerequisite: Admission to Nursing Program; ANAT 35 or equivalent and ANAT 36 or equivalent, or ANAT 40A or equivalent and ANAT 40B or equivalent, or ANAT 40C or equivalent, or ANAT 40D or equivalent and ENGL 1A or equivalent Corequisite: NURS 2 The principles of nursing as related to a culturally diverse population, adulthood through senescence. Theory and application of the Nursing Process including meaning of illness, promoting health patterns, hygiene, safety, asepsis, medication administration, elimination, communication. The Betty Neuman Model serves as the conceptual framework.

NURS 9A — Special Projects in Nursing 1 Unit
18.00 hours lecture. Degree Appropriate, CSU Degree Appropriate, CSU 36.00 hours lecture. 36.00 hours lecture.
Offered to selected students in recognition of academic interests and abilities to give them the opportunity to explore these interests and abilities in greater depth. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have an instructor’s authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced. Projects must be approved in advance.

NURS 9B — Special Projects in Nursing 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU Degree Appropriate, CSU 36.00 hours lecture. 36.00 hours lecture.
Offered to selected students in recognition of academic interests and abilities to give them the opportunity to explore these interests and abilities in greater depth. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have an instructor’s authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced. Projects must be approved in advance.

NURS 9C — Special Projects in Nursing 3 Units
(May be taken four times for credit.) Degree Appropriate, CSU Degree Appropriate, CSU 108.00 hours lab. 108.00 hours lab.
Offered to selected students in recognition of academic interests and abilities to give them the opportunity to explore these interests and abilities in greater depth. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have an instructor’s authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced. Projects must be approved in advance.

NURS 9D — Special Projects in Nursing 4 Units
(May be taken four times for credit.) Degree Appropriate, CSU Degree Appropriate, CSU 162.00 hours lab. 162.00 hours lab.
Offered to selected students in recognition of academic interests and abilities to give them the opportunity to explore these interests and abilities in greater depth. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have an instructor’s authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced. Projects must be approved in advance.

Cluster repeatability: Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.
Cluster: NURS 20, NURS 21, NURS 22, NURS 23

NURS 2 — Pharmacology 2 Units
36.00 hours lecture. Degree Appropriate, CSU Degree Appropriate, CSU 126.00 hours lab.
Prerequisite: Admission to Nursing Program and eligibility for MATH 51 Corequisite: NURS 1A The ethical and legal responsibilities in the administration of medications. Application of mathematical concepts, the Nursing Process, and drug therapy to the administration of fluids and medications.

NURS 3 — Medical-Surgical Nursing: Locomotion/Sensation/Integument/Oncology/Immunology 3.5 Units
30.00 hours lecture. Degree Appropriate, CSU Degree Appropriate, CSU 99.00 hours lab.
Prerequisite: NURS 2 or Advanced Placement Concepts of nursing assessment and intervention with application to clients with integumentary and immunologic disorders as well as dysfunctions of sensation and locomotion. An introduction to oncology nursing is included. The Betty Neuman Model serves as the conceptual framework.

NURS 4 — Maternity Nursing 3 Units
27.00 hours lecture. Degree Appropriate, CSU Degree Appropriate, CSU 81.00 hours lab.
Prerequisite: NURS 3 or Advanced Placement Concepts of nursing assessment and intervention with application to maternity and newborn clients. The Betty Neuman Model serves as the conceptual framework.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Prerequisites</th>
<th>Corequisites</th>
<th>Corequisites Type</th>
<th>Degree Appropriate</th>
<th>Non-Degree Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 5</td>
<td>Psychiatric Nursing</td>
<td>3</td>
<td>27.00</td>
<td>81.00</td>
<td>Prerequisite: NURS 4 or Advanced Placement and PSYC 1A</td>
<td></td>
<td>Degree Appropriate</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>NURS 6</td>
<td>Pediatric Nursing</td>
<td>3</td>
<td>27.00</td>
<td>81.00</td>
<td>Prerequisite: NURS 5 or Advanced Placement and CHILD 10 or PSYC 14</td>
<td></td>
<td>Degree Appropriate</td>
<td>CSU</td>
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<tr>
<td>NURS 7</td>
<td>Medical-Surgical Nursing</td>
<td>7</td>
<td>60.00</td>
<td>198.00</td>
<td>Prerequisite: NURS 6 or Advanced Placement</td>
<td></td>
<td>Degree Appropriate</td>
<td>CSU</td>
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</tr>
<tr>
<td>NURS 8</td>
<td>Medical-Surgical Nursing: Circulation and Oxygenation</td>
<td>5</td>
<td>45.00</td>
<td>144.00</td>
<td>Prerequisite: NURS 7 or Advanced Placement</td>
<td></td>
<td>Degree Appropriate</td>
<td>CSU</td>
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<tr>
<td>NURS 9</td>
<td>Leadership in Nursing</td>
<td>1</td>
<td>18.00</td>
<td></td>
<td>Prerequisite: NURS 7 or Advanced Placement</td>
<td></td>
<td>Degree Appropriate</td>
<td>CSU</td>
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<tr>
<td>NURS 10</td>
<td>Medical-Surgical Nursing: Integration/Regulation</td>
<td>4</td>
<td>45.00</td>
<td>96.00</td>
<td>Prerequisite: NURS 8, NURS 9 or Advanced Placement</td>
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<td>Degree Appropriate</td>
<td>CSU</td>
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<tr>
<td>NURS 11</td>
<td>Preceptorship in Nursing</td>
<td>2</td>
<td>112.00</td>
<td></td>
<td>Prerequisite: NURS 10 or Advanced Placement</td>
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<tr>
<td>NURS 20</td>
<td>Nursing Work Experience Program</td>
<td>1</td>
<td>75.00</td>
<td></td>
<td>Prerequisite: Compliance with Work Experience regulations as designated in</td>
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<td>Degree Appropriate</td>
<td>CSU</td>
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<td></td>
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<td></td>
<td>the College Catalog. Current satisfactory status in the Nursing Program.</td>
<td></td>
<td>Degree Appropriate</td>
<td>CSU</td>
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<tr>
<td>NURS 21</td>
<td>Nursing Work Experience Program</td>
<td>2</td>
<td>150.00</td>
<td></td>
<td>Prerequisite: Compliance with Work Experience regulations as designated in</td>
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<td>Degree Appropriate</td>
<td>CSU</td>
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<td></td>
<td>the College Catalog. Current satisfactory status in the Nursing Program.</td>
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<td>Degree Appropriate</td>
<td>CSU</td>
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</tr>
<tr>
<td>NURS 22</td>
<td>Nursing Work Experience Program</td>
<td>3</td>
<td>225.00</td>
<td></td>
<td>Prerequisite: Compliance with Work Experience regulations as designated in</td>
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<td>Degree Appropriate</td>
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<td></td>
<td>the College Catalog. Current satisfactory status in the Nursing Program.</td>
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<td>Degree Appropriate</td>
<td>CSU</td>
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<tr>
<td>NURS 23</td>
<td>Nursing Work Experience Program</td>
<td>4</td>
<td>300.00</td>
<td></td>
<td>Prerequisite: Compliance with Work Experience regulations as designated in</td>
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<td>Degree Appropriate</td>
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<td></td>
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<td></td>
<td>the College Catalog. Current satisfactory status in the Nursing Program.</td>
<td></td>
<td>Degree Appropriate</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>NURS 99</td>
<td>Special Projects in Nursing</td>
<td>2</td>
<td>108.00</td>
<td></td>
<td>Prerequisite: Placement in Nursing Program</td>
<td></td>
<td>Degree Appropriate</td>
<td>CSU</td>
<td></td>
</tr>
<tr>
<td>NUTR 10</td>
<td>Nutrition for Personal Health and Wellness</td>
<td>3</td>
<td>54.00</td>
<td></td>
<td>Prerequisite: Eligibility for ENGL 68</td>
<td></td>
<td>Degree Appropriate</td>
<td>CSU</td>
<td></td>
</tr>
</tbody>
</table>

For the LVN (Licensed Vocational Nurse), PT (Psychiatric Technician) or advanced placement transitioning into the role of the RN (Registered Nurse), theory and application of concepts of physical assessment, the relationship of homeostatic mechanisms to fluid and electrolyte balance/imbalance utilizing the Betty Neuman Model as the conceptual framework.
Course Descriptions

NF 20 — Principles of Foods With Lab 3 Units
36.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Introduction to basic food science principles and food preparation procedures with emphasis on ingredient functions and interaction; food preparation techniques and skills; sensory evaluation standards; food safety and sanitation; food preparation equipment and utensils; storage standards; and nutrient retention.

NF 25 — Essentials of Nutrition 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Scientific concepts of nutrition related to the function of nutrients in basic life processes with emphasis on current health issues; individual needs; functions and sources of nutrients; scientific method for analysis and evaluation of nutrition information; dietary guidelines and current nutrition recommendations; digestion, absorption and metabolism; health, fitness and disease; nutrition in the life span.

NF 25H — Essentials of Nutrition - Honors 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
Scientific concepts of nutrition related to the function of nutrients in basic life processes with emphasis on current health issues; individual needs; functions and sources of nutrients; scientific method for analysis and evaluation of nutrition information; dietary guidelines and current nutrition recommendations; digestion, absorption and metabolism; health, fitness and disease; nutrition in the life span. An honors course designed to provide an enriched experience. Students may not receive credit for both NF 25 and NF 25H.

NF 28 — Cultural and Ethnic Foods 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Advisory: Eligibility for ENGL 68
Regional, ethnic, cultural, religious, historical and social influences on food patterns and cuisines. Core components: specialized equipment and utensils related to cultures; traditional foods of selected cultures; geographic factors in food availability; global food issues; sanitation and safety practices.

NF 30 — Food Science Technologies 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Advisory: Eligibility for ENGL 68
Exploration of food chemistry, food processing and technology and how these affects the color, flavor, texture, aroma and quality of foods. Core components: government regulation of processing and labeling, sensory evaluation, scientific research methods, function of water in foods, pH and acidity, food processing technologies, nutritional labeling, packaging; dispersion systems, enzyme reactions, food additives, composition and properties of food.

NF 61 — Creative Foods 3 Units
36.00 hours lecture. Degree Appropriate
54.00 hours lab.
Advisory: NF 20 or equivalent food preparation experience
Instruction in the skills necessary for more advanced methods of food preparation. Topics include garde manger, baking and pastry, and international cuisine. Techniques of healthy cooking, and vegetarian cuisine with emphasis placed on knife skills, garnishing, plate presentation and creative decorating.

NF 62 — Meal Management 3 Units
36.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Advisory: NF20 or equivalent food preparation experience
Develop management skills related to food preparation, emphasizing planning, preparing, and serving adequate and attractive meals while managing resources including time, money and labor. Includes laboratory experience in planning, preparing and serving meals.

NF 81 — Cooking for Your Heart and Health 1 Unit
(May be taken three times for credit.) Non-Degree Credit
(May be taken for option of letter grade or Credit/No Credit.)
12.00 hours lecture. 18.00 hours lab.
Principles and techniques of healthful food preparation emphasizing the reduction of fat, saturated fat, trans fat, cholesterol, and sodium, and the increase of fiber and nutrients in foods. The course includes laboratory experience in preparation of health promoting foods and meals.

NF 82 — Vegetarian Cuisine 1 Unit
(May be taken three times for credit.) Non-Degree Credit
(May be taken for option of letter grade or Credit/No Credit.)
12.00 hours lecture. 18.00 hours lab.
Principles and techniques of vegetarian food preparation and investigation of issues related to vegetarian eating practices. Includes laboratory experience in preparation of vegetarian foods and meals.

OCEA 10 — Introduction to Oceanography 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
A survey course introducing the geological, chemical, physical, and biological aspects of the Earth’s ocean. Topics include plate tectonics, physical ocean basins and continental margins, ocean sediment, atmosphere and ocean circulation, waves and tides, coasts, and marine ecology. The companion Oceanography Lab (OCEA 10L) is recommended for students needing a lab to transfer to a 4-year college/university. Field trips are required.

OCEA 10H — Introduction to Oceanography - Honors 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
An honors course designed to provide an enriched experience. Introduces the geological, chemical, physical, and biological aspects of the Earth’s ocean. Topics include plate tectonics, physiography of ocean basins and continental margins, ocean sediment, atmosphere and ocean circulation, waves and tides, coasts, and marine ecology. The Companion Oceanography Lab (OCEA 10L) is recommended for students needing a lab to transfer to a 4-year college/university. Field trips are required. Students may not receive credit for both OCEA 10 and OCEA 10H.

PHIL 3 — Logic in Practice 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
The analysis of language as an instrument of sound thinking in morals, politics and everyday life. Assists students to analyze an argument, avoid faulty conclusions in reasoning, understand levels of meaning and kinds of arguments, avoid verbal pitfalls, understand the steps of scientific methods and identify value assumptions.

PHIL 3H — Logic in Practice - Honors 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
The analysis of language as an instrument of sound thinking in morals, politics and everyday life. Assists students to analyze an argument, avoid faulty conclusions in reasoning, understand levels of meaning and kinds of arguments, avoid verbal pitfalls, understand the steps of scientific methods and identify value assumptions. An honors course designed to provide an enriched experience. Students may not receive credit for both PHIL 3 and PHIL 3H.

PHIL 5 — Introduction to Philosophy 3 Units
(CAN PHIL 2) Degree Appropriate, CSU, UC
54.00 hours lecture. Prerequisite: Eligibility for ENGL 68
An exploration of basic issues in ethics, social philosophy, metaphysics, theories of knowledge and contemporary philosophies of life.
## PHIL 15H — Major World Religions - Honors 3 Units
$54.00$ hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
Examines the salient features of the world’s major and enduring religions. Religion is approached as the expression of one’s ultimate concern as a means of understanding the historic and ideological foundations and aspirations of the peoples of the world. The following (or more) religions are presented and examined both appreciatively and critically: Hinduism, Buddhism, Taoism, Confucianism, Islam, Judaism, Christianity.

## PHIL 20 — History of Western Philosophy 3 Units
$54.00$ hours lecture. Degree Appropriate, CSU, UC
Examines the major western philosophers and philosophical ideas from pre-Socratic times to the Renaissance.

## PHIL 20B — History of Western Philosophy 3 Units
$54.00$ hours lecture. Degree Appropriate, CSU, UC
Examines the major western philosophy and philosophical ideas from the Renaissance to the twentieth century.

## PHOT 1 — Laboratory Studies: Black and White Photography 1 Unit
(May be taken for Credit/No Credit only.) Non-Degree Credit
$18.00$ hours lecture. Degree Appropriate, CSU, UC
Extended black and white laboratory experiences to supplement those available in the regular program. Provides students the opportunity to pursue more advanced projects and experiments. Students who repeat this course will improve skills through further instruction and practice.

## PHOT 2 — Laboratory Studies: Color Photography 1 Unit
(May be taken for Credit/No Credit only.) Non-Degree Credit
$54.00$ hours lab. Degree Appropriate, CSU, UC
Explores the use of continuous tone and alternative black and white techniques and processes. Emphasis will be on solving photographic problems through the use of current techniques such as montage printing, Polaroid and xerographic applications, hand coloring, and emulsion coating (cyanotype, Luminous/Liquid Light) as well as other special techniques.

## PHOT 5 — History of Photography 3 Units
$54.00$ hours lecture. Degree Appropriate, CSU, UC
Survey of the history of photography from circa 1839 to the present. An introduction to concepts of photographic representation and their impact on society.

## PHOT 10 — Basic Digital and Film Photography 3 Units
$36.00$ hours lecture. Degree Appropriate, CSU, UC
$54.00$ hours lab. Degree Appropriate, CSU, UC
The basic mechanical, optical, and chemical principles of photography, including digital image systems. Laboratory experience involves problems related to camera and image output techniques.

## PHOT 11 — Advanced Professional Photography 4 Units
$36.00$ hours lecture. Degree Appropriate, CSU, UC
$108.00$ hours lab. Degree Appropriate, CSU, UC
Prerequisite: PHOT 10
Advisory: ARTD 15A
Exploration of current professional techniques. Includes studio and field assignments related to problems encountered in advanced photography. Topics include but are not limited to medium and large format cameras, studio product and portraiture, strobe and tungsten lighting, and computer basics for professional photographers.

## PHOT 12 — Photographic Alternatives 3 Units
$36.00$ hours lecture. Degree Appropriate, CSU, UC
$54.00$ hours lab. Degree Appropriate, CSU, UC
Prerequisite: PHOT 10
Explores the use of continuous tone and alternative black and white techniques and processes. Emphasis will be on solving photographic problems through the use of current techniques such as montage printing, Polaroid and xerographic applications, hand coloring, and emulsion coating (cyanotype, Luminous/Liquid Light) as well as other special techniques.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 18</td>
<td>Portraiture and Wedding Photography</td>
<td>3</td>
<td>Degree</td>
<td></td>
<td>Techniques and photographic procedures for taking informal, formal, environmental and group portraits. In depth study and practice in professional wedding photography.</td>
</tr>
<tr>
<td>PHOT 20</td>
<td>Color Photography</td>
<td>3</td>
<td>Degree</td>
<td>PHOT 10</td>
<td>An introduction to current methods of producing color media, color negatives, positive transparencies, and outputting color prints.</td>
</tr>
<tr>
<td>PHOT 21</td>
<td>Exploring Color Photography</td>
<td>3</td>
<td>Degree</td>
<td>PHOT 20</td>
<td>Explores the application of color processes as they relate to commercial and artistic styles. Emphasis is on innovative use of color and contemporary techniques. Includes media manipulation and unique processing, coloring negatives, 8x10 Polaroid, digital imagery, specialized lighting, set building, and quality control.</td>
</tr>
<tr>
<td>PHOT 28</td>
<td>Photography Portfolio Development</td>
<td>3</td>
<td>Degree</td>
<td>PHOT 20, PHOT 11, PHOT 20</td>
<td>Development of a photography portfolio for job application or gallery exhibition purposes.</td>
</tr>
<tr>
<td>PHOT 30</td>
<td>Commercial and Illustrative Photography</td>
<td>3</td>
<td>Degree</td>
<td></td>
<td>Fall Semester lecture. Application of photographic principles to commercial and illustrative photography. Practical experience in studio product photography, illustration, fashion, and architectural photography. Areas of promotion and pricing will be covered. Both black-and-white and color media will be used.</td>
</tr>
<tr>
<td>PHOT 99</td>
<td>Special Projects in Photography</td>
<td>2</td>
<td>Degree</td>
<td></td>
<td>In order to offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students must have an instructor's authorization before enrolling in this course. Students repeating this course will make individual contracts of a more advanced nature with the instructor to insure that proficiencies are enhanced.</td>
</tr>
</tbody>
</table>

**PHYSICAL EDUCATION: ADAPTIVE**

Cluster repeatability: Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.

Clusters:
- PE-L 2, PE-L 2-2
- PE-L 14, PE-L 14-2
- PE-L 18, PE-L 18-2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-L 10</td>
<td>Wheelchair Sports</td>
<td>1</td>
<td>Degree</td>
<td></td>
<td>Designed for students with a disability or limitation who require special assistance or equipment to participate in leisure activities. Course content will vary each semester in order to meet current students' needs. Students who repeat this course will improve their skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-L 14</td>
<td>Activity Programs for the Physically Limited</td>
<td>.5</td>
<td>Degree</td>
<td></td>
<td>Designed for students with a disability or limitation who require special assistance or equipment to participate in leisure activities. Course content will vary each semester in order to meet current students' needs. Students who repeat this course will improve their skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-L 18</td>
<td>Weight Training for the Physically Limited</td>
<td>1</td>
<td>Degree</td>
<td></td>
<td>Designed to assist students with a physical limitation develop strength, flexibility and endurance through weight training. Students are introduced to basic skills and strategies of the health-related physical fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-L 18-2</td>
<td>Weight Training for the Physically Limited</td>
<td>.5</td>
<td>Degree</td>
<td></td>
<td>Designed to assist students with a physical limitation develop strength, flexibility and endurance through weight training. Students are introduced to basic skills and strategies of the health-related physical fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
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</table>
### PHYSICAL EDUCATION: AQUATICS

#### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-A 8A</td>
<td>Lifeguard Training</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Meets American Red Cross requirements for lifeguard training. To receive certification, students must pass the written and practical skills test with an 80% or better. Students who meet all qualifications will receive the American Red Cross Lifeguard Certificate. C.P.R. for the Professional Rescuer and First Aid Certificates. The objective for students who repeat this course is to recertify and improve rescue techniques through supervised practice and instruction.</td>
</tr>
<tr>
<td>PE-A 8A-2</td>
<td>Swimming - Beginning</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Designed to teach basic swimming strokes and aquatic skills to individuals with little or no swimming ability. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-A 8B</td>
<td>Swimming - Intermediate</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Designed to improve competence in swimming ability for individuals who have had instruction in all of the basic strokes and can swim in deep water. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-A 8B-2</td>
<td>Swimming - Intermediate</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Designed to improve competence in swimming ability for individuals who have had instruction in all of the basic strokes and can swim in deep water. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-A 8C</td>
<td>Swimming - Advanced</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Designed to offer aquatic techniques of an advanced level and to refine the skill of the competent swimmer. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-A 8C-2</td>
<td>Swimming - Advanced</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Designed to offer aquatic techniques of an advanced level and to refine the skill of the competent swimmer. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-A 8D</td>
<td>Water Polo</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Fundamental water polo skills including conditioning, drills, and game situations. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-A 8D-2</td>
<td>Water Polo</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Fundamental water polo skills including conditioning, drills, and game situations. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-A 14</td>
<td>Water Safety Instructor</td>
<td>2 Units</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 180.00 hours activity. Designed to improve competence in swimming ability for individuals who have had instruction in all of the basic strokes and can swim in deep water. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-A 14-2</td>
<td>Water Safety Instructor</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Fundamental water polo skills including conditioning, drills, and game situations. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
**PHYSICAL EDUCATION: ATHLETICS**

**Clusters:**
- PE-X 8A, PE-X 8B
- PE-X 6 — Baseball - Men 2 Units
- PE-X 9A — Basketball - Men 1 Unit
- PE-X 10A, PE-X 10B
- PE-X 11 — Cross Country - Men 2 Units
- PE-X 12 — Cross Country - Women 2 Units
- PE-X 18 — Golf - Men 2 Units
- PE-X 19 — Golf - Women 2 Units
- PE-X 24 — Soccer - Men 2 Units
- PE-X 24 — Soccer - Women 2 Units

**Course Descriptions**

**PE-X 6 — Baseball - Men 2 Units**
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
180.00 hours activity.
Enrollment is limited to team candidates and includes a minimum of 10 hours per week practice and intercollegiate competition. Students who repeat this course will improve skills through further instruction and practice.

**PE-X 9A — Basketball - Men 1 Unit**
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
90.00 hours activity.
Intended for Men's Intercollegiate Basketball Team candidates to provide instruction in the components of training and conditioning related to the sport of basketball. Students who repeat this course will improve skills through further instruction and practice.

**PE-X 10A — Basketball - Women 1 Unit**
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
90.00 hours activity.
Intended for Women's Intercollegiate Basketball Team candidates to provide instruction in the components of training and conditioning related to the sport of basketball. Students who repeat this course will improve skills through further instruction and practice.

**PE-X 11 — Cross Country - Men 2 Units**
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
180.00 hours activity.
Designed for Men's Intercollegiate Cross Country team candidates and provides instruction in the components of training and conditioning related to the sport of cross country. Students who repeat this course will improve skills through further instruction and practice.

**PE-X 12 — Cross Country - Women 2 Units**
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
180.00 hours activity.
Designed for Women's Intercollegiate Cross Country team candidates and provides instruction in the components of training and conditioning related to the sport of cross country. Students who repeat this course will improve skills through further instruction and practice.

**PE-X 18 — Golf - Men 2 Units**
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
180.00 hours activity.
Designed for Men's Intercollegiate Golf Team candidates and provides instruction in the components and training related to the sport of golf. Students who repeat this course will improve skills through further instruction and practice.

**PE-X 19 — Golf - Women 2 Units**
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
180.00 hours activity.
Designed for Women's Intercollegiate Golf Team candidates and provides instruction in the components and training related to the sport of golf. Classes will be held off campus and require some traveling. Students who repeat this course will improve skills through further instruction and practice. Students must have their own golf clubs.

**PE-X 24 — Soccer - Men 2 Units**
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
180.00 hours activity.
Designed for Men's Intercollegiate Soccer Team candidates and provides instruction in the components of training and conditioning related to the sport of soccer. Students who repeat this course will improve skills through further instruction and practice.
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Units</th>
<th>Activity</th>
<th>Repeat Information</th>
<th>Degree Appropriate</th>
<th>CSU, UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-X 25 — Soccer - Women</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for Women’s Intercollegiate Soccer Team candidates and provides instruction in the components of training and conditioning related to the sport of soccer. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 26 — Softball - Women</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for Women’s Softball Team candidates and provides instruction in the components of training and conditioning related to the sport of softball. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 28 — Swimming - Men</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for Men’s Intercollegiate Swim Team candidates and provides instruction in the components of training and conditioning related to the sport of swimming. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>PE-X 29 — Tennis - Men</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for Men’s Intercollegiate Tennis Team candidates and provides instruction in the components of training and conditioning related to the sport of tennis. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>PE-X 30 — Swimming - Women</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for Women’s Intercollegiate Swim Team candidates and provides instruction in the components of training and conditioning related to the sport of swimming. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 32 — Tennis - Men</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for Men’s Intercollegiate Tennis Team candidates and provides instruction in the components of training and conditioning related to the sport of tennis. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>PE-X 34 — Tennis - Women</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for Men’s Intercollegiate Tennis Team candidates and provides instruction in the components of training and conditioning related to the sport of tennis. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>PE-X 36 — Track and Field - Men</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for students wishing to compete and/or train in intercollegiate track and field. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>PE-X 38 — Track and Field - Women</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for students wishing to compete and/or train in intercollegiate track and field. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 40 — Volleyball - Women</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for students wishing to compete and/or train in intercollegiate volleyball. Provides instruction in the components of training and conditioning related to the sport of volleyball. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 42 — Track and Field - Women</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for students wishing to compete and/or train in intercollegiate track and field. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 44 — Volleyball - Women</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for students wishing to compete and/or train in intercollegiate volleyball. Provides instruction in the components of training and conditioning related to the sport of volleyball. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
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</tr>
<tr>
<td>PE-X 46 — Volleyball - Women</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for students wishing to compete and/or train in intercollegiate volleyball. Provides instruction in the components of training and conditioning related to the sport of volleyball. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 48 — Water Polo - Men</td>
<td>2</td>
<td>180.00</td>
<td>May be taken four times for credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for students wishing to compete and/or train in intercollegiate water polo and provides instruction in the components of training and conditioning related to the sport of water polo. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 50 — Wrestling - Men</td>
<td>2</td>
<td>180.00</td>
<td>May be taken for option of letter grade or Credit/No Credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Designed for Men’s Intercollegiate Wrestling Team candidates and provides instruction in the components of training and conditioning related to the sport of wrestling. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 70 — Pep Squad</td>
<td>2</td>
<td></td>
<td>May be taken for option of letter grade or Credit/No Credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Provides training and experience for members of pep squads or rally units who are directly supportive of Mt. SAC activities. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-X 99 — Off-Season Athletics</td>
<td>2</td>
<td></td>
<td>May be taken for option of letter grade or Credit/No Credit.</td>
<td>Degree Appropriate</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Off-season intercollegiate athletics. Designed for athletic team candidates and includes practice, conditioning and game play. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
</tbody>
</table>

(Course Descriptions continue on the next page.)
### PHYSICAL EDUCATION: FITNESS

**Cluster repeatability:**
Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.

Clusters:
- PE-F 4, PE-F 4-2
- PE-F 9, PE-F 9-2
- PE-F 10, PE-F 10-2
- PE-F 12, PE-F 12-2
- PE-F 17, PE-F 17-2
- PE-F 36, PE-F 36-2, PE-F 37
- PE-F 38, PE-F 38-2, PE-F 39

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-F 2A — Body Building - Beginning</td>
<td>1 Unit</td>
<td>Presents beginning components of physical fitness. Students identify overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 2A-2 — Body Building - Beginning</td>
<td>.5 Unit</td>
<td>Presents beginning components of physical fitness. Students identify individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 2B — Body Building - Advanced</td>
<td>1 Unit</td>
<td>Develops components of physical fitness. Students analyze individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 2B-2 — Body Building - Advanced</td>
<td>.5 Unit</td>
<td>Designs advanced components of physical fitness. Students integrate individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 4 — Cardiovascular Conditioning</td>
<td>1 Unit</td>
<td>Designs advanced components of physical fitness. Students integrate individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 4-2 — Cardiovascular Conditioning</td>
<td>.5 Unit</td>
<td>Designs advanced components of physical fitness. Students integrate individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 6A — Physical Fitness - Beginning</td>
<td>1 Unit</td>
<td>Determines advanced components of physical fitness. Students integrate individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 6A-2 — Physical Fitness - Beginning</td>
<td>.5 Unit</td>
<td>Determines advanced components of physical fitness. Students integrate individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 6B — Physical Fitness - Intermediate</td>
<td>1 Unit</td>
<td>Develops components of physical fitness. Students analyze individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 6B-2 — Physical Fitness - Intermediate</td>
<td>.5 Unit</td>
<td>Develops components of physical fitness. Students analyze individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 9 — Conditioning for Sports</td>
<td>1 Unit</td>
<td>Develops components of physical fitness. Students analyze individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 9-2 — Conditioning for Sports</td>
<td>.5 Unit</td>
<td>Develops components of physical fitness. Students analyze individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity.</td>
</tr>
<tr>
<td>PE-F 10 — Weight Training</td>
<td>1 Unit</td>
<td>Develops components of physical fitness. Students analyze individual fitness level and participate in activities designed to improve overall fitness. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity.</td>
</tr>
</tbody>
</table>
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Duration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-F 10-2 — Weight Training</td>
<td>.5 Unit</td>
<td></td>
<td></td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>36.00 hours activity. A muscular conditioning program using machines and free weights. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 12 — Fitness and Body Conditioning</td>
<td>1 Unit</td>
<td></td>
<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
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<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td></td>
<td>54.00 hours activity. Circuit training, aerobic activity and overview of health concepts. Emphasis on nutrition, weight management, stress reduction and the benefits of exercise on overall health. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 13 — Exercise Dynamics</td>
<td>2 Units</td>
<td></td>
<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
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<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>108.00 hours activity. Increased fitness and body conditioning with increased frequency and duration of circuit training and aerobic activity; continued overview of health concepts; heightened emphasis on nutrition, weight management, stress reduction and the benefit of exercise on overall health. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 17 — Fitness Walking</td>
<td>1 Unit</td>
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<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
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<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>An overall wellness program through fitness walking, a low-impact aerobic activity. Consists of participation in walking courses around Mt. San Antonio College and the surrounding community. Also includes nutrition, personal skill development, weight management, cardiovascular endurance, stress management and goal setting. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 17-2 — Fitness Walking</td>
<td>.5 Unit</td>
<td></td>
<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>36.00 hours activity. An overall wellness program through fitness walking, a low-impact aerobic activity. Consists of participation in walking courses around Mt. San Antonio College and the surrounding community. Also includes nutrition, personal skill development, weight management, cardiovascular endurance, stress management and goal setting. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 18 — Fitness Fundamentals</td>
<td>2 Units</td>
<td></td>
<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td></td>
<td>108.00 hours activity. Provides the foundations in specific areas of fitness to set-up, maintain and organize a personalized fitness program. Presents in-depth coverage of each area of fitness in managing and promoting an individualized fitness regime. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 19 — Strength Training</td>
<td>2 Units</td>
<td></td>
<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
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<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td></td>
<td>108.00 hours activity. Designed for students concentrating on strength development through various types of exercise. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 20-2 — Cardiorespiratory Training</td>
<td>.5 Unit</td>
<td></td>
<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
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<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>108.00 hours activity. Individualized exercise programs designed to improve cardiorespiratory performance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 21 — Total Fitness</td>
<td>2 Units</td>
<td></td>
<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
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<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>108.00 hours activity. Fitness training with increased frequency and duration. Includes nutrition, exercise concepts, stress management, cardiovascular conditioning, muscle strength and flexibility training. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 22 — Cardiorespiratory Training</td>
<td>1 Unit</td>
<td></td>
<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>54.00 hours activity. Individualized exercise programs designed to improve cardiorespiratory performance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 25 — Core Performance and Foundation Movement</td>
<td>2 Units</td>
<td></td>
<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td></td>
<td>108.00 hours activity. Body core training and foundation movement for students interested in improving their fitness level. Students who repeat this class will improve with continued practice and instruction.</td>
</tr>
<tr>
<td>PE-F 30 — Baseline Fitness Assessment</td>
<td>.25 Unit</td>
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<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td></td>
<td>18.00 hours activity. Baseline fitness assessment of body composition, strength, strength endurance, cardiovascular endurance and flexibility. Includes interpretation of assessment results and guidelines for a personal exercise program. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 31 — Fitness Testing</td>
<td>1 Unit</td>
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<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>54.00 hours activity. Personal fitness assessment of body composition, strength, strength endurance, cardiovascular endurance and flexibility. Includes nutrition, fitness components, stress management, interpretation of assessment results, and exercise guidelines. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 34 — Cardiorespiratory Training</td>
<td>1 Unit</td>
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<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>54.00 hours activity. Individualized exercise programs designed to improve cardiorespiratory performance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 35 — Cardiorespiratory Training</td>
<td>2 Units</td>
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<td></td>
<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>108.00 hours activity. Individualized exercise programs designed with increased duration and frequency to improve cardiorespiratory performance. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 36 — Circuit Training</td>
<td>1 Unit</td>
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<td>(May be taken for credit.) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td></td>
<td>54.00 hours activity. Muscular strength and endurance exercise on circuit training equipment. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
PE-I 35 | Aerobics | 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Group aerobic exercise to improve cardiorespiratory efficiency. Students who repeat this course will improve skills through further instruction and practice.

PE-I 36-2 | Aerobics | .5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Group aerobic exercise to improve cardiorespiratory efficiency. Students who repeat this course will improve skills through further instruction and practice.

PE-I 37 | Circuit Training | 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
108.00 hours activity.
Muscular strength and endurance exercise on circuit training equipment with increased frequency and duration. Students who repeat this course will improve skills through further instruction and practice.

PE-I 38 | Aerobics | 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Group aerobic exercise to improve cardiorespiratory efficiency. Students who repeat this course will improve skills through further instruction and practice.

PE-I 39 | Aerobics | 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
108.00 hours activity.
Group aerobic exercise to improve cardiorespiratory efficiency. Students who repeat this course will improve skills through further instruction and practice.

PE-I 40 | Physical Skills Preparation for Administration | 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
108.00 hours activity.
Through supervised and individualized training programs, the student will develop the necessary conditioning levels to pass entrance examinations in Administration of Justice and Fire Technology fields. Students who repeat this course will improve skills through further instruction and practice.

PE-I 41 | Firefighter Physical Ability Test | .1 Unit
(May be taken four times for credit.) Non-Degree Credit
(May be taken for Credit/No Credit only.)
2.00 hours activity.
Administration of physical ability test examination. Includes nutrition, safety, body mechanics, exercise guidelines and execution of fire-related tasks. Successful completion of this course is required by various fire agencies for employment. Students must obtain test packet from website: Firepat.mtsac.edu prior to enrolling. Repeating this course will allow for renewal of certificate and improvement of technique through further instruction and practice.

PE-I 42 | Rock Climbing | 1 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Instruction in rock climbing. Includes preparation, equipment, techniques and strategies of rock climbing. Students who repeat this course will improve skills through further instruction and practice.

PE-I 43 | Badminton - Beginning | 1 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Basic badminton fundamentals and technique. Includes care of equipment; singles and doubles strategies. Students who repeat this course will improve skills through further instruction and practice.

PE-I 44 | Badminton - Intermediate | 1 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Intermediate badminton fundamentals and techniques, including competitive strategies. Students who repeat this course will improve skills through further instruction and practice.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Unit(s)</th>
<th>Prerequisites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-I 4B-2</td>
<td>Badminton - Intermediate</td>
<td>.5 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>36.00 hours activity. Intermediate badminton fundamentals and techniques, including competitive strategies. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-I 18B-2</td>
<td>Golf - Intermediate</td>
<td>.5 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>36.00 hours activity. Instruction for the golfer with previous golf experience. Includes putting, game management, club selection, and principles of the swing. Students must have their own golf clubs. Classes will be held at sites both on and off the Mt. SAC campus. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-I 18A-2</td>
<td>Golf - Advanced</td>
<td>.5 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>54.00 hours activity. Designed for the advanced badminton player. Includes advanced competition strategies and techniques. Students who repeat this course will receive advanced instruction to prepare for competitive situations.</td>
</tr>
<tr>
<td>PE-I 18B</td>
<td>Golf - Beginning</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>54.00 hours activity. Basic fundamentals of golf. Emphasis on technique, strategy, and rules. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-I 18C-2</td>
<td>Golf - Advanced</td>
<td>.5 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>54.00 hours activity. Instruction for the proficient golfer (Sub 15 Handicap). Emphasis on golf swing analysis. Classes will be held at sites both on and off the Mt. SAC campus. Golf clubs required. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-I 18C</td>
<td>Golf - Advanced</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>54.00 hours activity. Designed for the advanced badminton player. Includes advanced competition strategies and techniques. Students who repeat this course will receive advanced instruction to prepare for competitive situations.</td>
</tr>
<tr>
<td>PE-I 18A</td>
<td>Golf - Beginning</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>54.00 hours activity. Basic fundamentals of golf. Emphasis on technique, strategy, and rules. Students who repeat this course will improve skills through further instruction and practice.</td>
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<tr>
<td>PE-I 18A-2</td>
<td>Golf - Beginning</td>
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<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>36.00 hours activity. Designed for the advanced badminton player. Includes advanced competition strategies and techniques. Students who repeat this course will receive advanced instruction to prepare for competitive situations.</td>
</tr>
<tr>
<td>PE-I 17A-2</td>
<td>Jeet Kune Do - Intermediate</td>
<td>.5 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>36.00 hours activity. Intermediate principles of Bruce Lee's martial art. Emphasis on footwork, distance, and technique for combat efficiency in self-defense. Students who repeat this course will improve proficiency as a result of continued instruction and practice.</td>
</tr>
<tr>
<td>PE-I 17B</td>
<td>Jeet Kune Do - Intermediate</td>
<td>1 Unit</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU, UC</td>
<td>54.00 hours activity. Designed for the advanced badminton player. Includes advanced competition strategies and techniques. Students who repeat this course will receive advanced instruction to prepare for competitive situations.</td>
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<tr>
<td>PE-I 17B-2</td>
<td>Jeet Kune Do - Intermediate</td>
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<td>PE-I 17A</td>
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<td>PE-I 17B</td>
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<td>PE-I 17B</td>
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</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Unit(s)</td>
<td>Description</td>
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<tr>
<td>PE-I 30A</td>
<td>Filipino Martial Arts - Beginning</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken four times for credit.) 54.00 hours lab. Filipino martial arts of Eskrima and Arnis. Basic weapons training for defense in armed and unarmed scenarios. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-I 30A-2</td>
<td>Filipino Martial Arts - Beginning</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Filipino martial arts of Eskrima and Arnis. Basic weapons training for defense in armed and unarmed scenarios. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-I 30B</td>
<td>Filipino Martial Arts - Intermediate</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. The Filipino martial arts of Eskrima and Arnis. Intermediate armed, unarmed and edged weapons training. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-I 30B-2</td>
<td>Filipino Martial Arts - Intermediate</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. The Filipino martial arts of Eskrima and Arnis. Intermediate armed, unarmed and edged weapons training. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-I 31A</td>
<td>Jujitsu - Beginning</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Fundamentals of Brazilian Jujitsu. Basic positions, breakdowns, training techniques, strategy, finishing holds, competition and philosophy. Students who repeat this course will improve their skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-I 31A-2</td>
<td>Jujitsu - Beginning</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Fundamentals of Brazilian Jujitsu. Basic positions, breakdowns, training techniques, strategy, finishing holds, competition and philosophy. Students who repeat this course will improve their skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-I 31B</td>
<td>Jujitsu - Intermediate</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Intermediate Brazilian Jujitsu. Progressions in positions, breakdowns, training techniques, strategy, finishing holds, competition and philosophy. Students who repeat this course will improve their skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-I 31B-2</td>
<td>Jujitsu - Intermediate</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Intermediate Brazilian Jujitsu. Progressions in positions, breakdowns, training techniques, strategy, finishing holds, competition and philosophy. Students who repeat this course will improve their skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-I 32</td>
<td>Kickboxing</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Presents the martial sport of kickboxing. Includes basic techniques for offense and defense, cardiovascular endurance, strategy and training modes. Students who repeat this course will improve skills through further instruction and practice.</td>
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</tr>
<tr>
<td>PE-I 33</td>
<td>Kickboxing</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Presents the martial sport of kickboxing. Includes basic techniques for offense and defense, cardiovascular endurance, strategy and training modes. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
<tr>
<td>PE-I 33-2</td>
<td>Kickboxing</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Presents the martial sport of kickboxing. Includes basic techniques for offense and defense, cardiovascular endurance, strategy and training modes. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
<tr>
<td>PE-I 34</td>
<td>Women's Self Defense</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Techniques for personal protection and safety with emphasis on defensive tactics for women. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
<tr>
<td>PE-I 34-2</td>
<td>Women's Self Defense</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Techniques for personal protection and safety with emphasis on defensive tactics for women. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
<tr>
<td>PE-I 35</td>
<td>Karate</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Fundamentals of traditional karate. Includes form, technique, history and philosophy. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
<tr>
<td>PE-I 35-2</td>
<td>Karate</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Fundamentals of traditional karate. Includes form, technique, history and philosophy. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
<tr>
<td>PE-I 35A</td>
<td>Tai Chi Chuan - Beginning</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Fundamentals of Tai Chi Chuan as a martial art exercise for health and fitness, meditation, relaxation and self defense. Basic therapeutic exercises in the Tai Chi Chuan format will be presented. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
<tr>
<td>PE-I 35A-2</td>
<td>Tai Chi Chuan - Beginning</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Fundamentals of Tai Chi Chuan as a martial art exercise for health and fitness, meditation, relaxation and self defense. Basic therapeutic exercises in the Tai Chi Chuan format will be presented. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
<tr>
<td>PE-I 37A</td>
<td>Tai Chi Chuan - Intermediate</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54.00 hours activity. Intermediate Tai Chi Chuan fundamentals and principles. Includes instruction in a traditional long form. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
<tr>
<td>PE-I 37A-2</td>
<td>Tai Chi Chuan - Intermediate</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 36.00 hours activity. Intermediate Tai Chi Chuan fundamentals and principles. Includes instruction in a traditional long form. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
</tr>
</tbody>
</table>
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-I 37C —</td>
<td>Tai Chi Chuan - Advanced</td>
<td>1 Unit</td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade</td>
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</tr>
<tr>
<td></td>
<td>or Credit/No Credit.)</td>
<td></td>
</tr>
<tr>
<td>PE-I 37C-2 —</td>
<td>Tai Chi Chuan - Advanced</td>
<td>.5 Unit</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>or Credit/No Credit.)</td>
<td></td>
</tr>
<tr>
<td>PE-I 38</td>
<td>Skiing Skills</td>
<td>1 Unit</td>
</tr>
<tr>
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<td>(May be taken for option of letter grade</td>
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<tr>
<td>PE-I 40A</td>
<td>— Tennis - Beginning</td>
<td>1 Unit</td>
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<td>PE-I 40A-2 —</td>
<td>Tennis - Intermediate</td>
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<tr>
<td>PE-I 40B</td>
<td>— Tennis - Intermediate</td>
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<td>PE-I 40C</td>
<td>— Tennis - Advanced</td>
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<tr>
<td>PE-I 44</td>
<td>— Track and Field</td>
<td>1 Unit</td>
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<tr>
<td>PE-I 44-2</td>
<td>— Track and Field</td>
<td>.5 Unit</td>
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<tr>
<td>PE-I 48</td>
<td>— Wrestling</td>
<td>1 Unit</td>
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<tr>
<td>PE-I 48-2</td>
<td>— Wrestling</td>
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<tr>
<td>PE-I 50A</td>
<td>— Yoga</td>
<td>1 Unit</td>
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<td>PE-I 50A-2</td>
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<tr>
<td>PE-I 51</td>
<td>— Iyengar Yoga</td>
<td>1 Unit</td>
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<tr>
<td>PE-I 51-2</td>
<td>— Iyengar Yoga</td>
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<tr>
<td>PE-I 52</td>
<td>— Individual Sports</td>
<td>1 Unit</td>
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<tr>
<td>PE-I 52-2</td>
<td>— Individual Sports</td>
<td>.5 Unit</td>
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</tbody>
</table>

*May be taken for option of letter grade or Credit/No Credit.*

*May be taken four times for credit.*

*Degree Appropriate, CSU, UC*
Clusters:
 PE-S 2, PE-S 2-2
 PE-S 10, PE-S 10-2
 PE-S 12, PE-S 12-2
 PE-S 13, PE-S 13-2
 PE-S 16, PE-S 16-2
 PE-S 18, PE-S 18-2
 PE-S 19, PE-S 19-2
 PE-S 35, PE-S 35-2

PE-S 2 — Basketball
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Basic skills, fundamentals, rules and strategies for team play in basketball. Students who repeat this course will improve skills through further instruction and practice.

PE-S 2-2 — Basketball
0.5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Basketball skills, fundamentals and game play. Students who repeat this course will improve skills through further instruction and practice.

PE-S 10 — Soccer
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Soccer skills, fundamentals and game play. Students who repeat this course will improve skills through further instruction and practice.

PE-S 10-2 — Soccer
0.5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Soccer skills, fundamentals and game play. Students who repeat this course will improve skills through further instruction and practice.

PE-S 12 — Baseball
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Basic skills, rules and strategies for team play in baseball. Students who repeat this course will improve skills through further instruction and practice.

PE-S 12-2 — Baseball
0.5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Basic skills, rules and strategies for team play in baseball. Students who repeat this course will improve skills through further instruction and practice.

PE-S 13 — Football
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Basic skills, rules and strategies for team play in football. Students who repeat this course will improve skills through further instruction and practice.

PE-S 13-2 — Football
0.5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Basic skills, rules and strategies for team play in football. Students who repeat this course will improve skills through further instruction and practice.

PE-S 16 — Softball
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Basic skills, rules and strategies for team play in softball. Students who repeat this course will improve skills through further instruction and practice.

PE-S 16-2 — Softball
0.5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Basic skills, rules and strategies for team play in softball. Students who repeat this course will improve skills through further instruction and practice.

PE-S 18 — Indoor Soccer
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Indoor soccer skills, fundamentals and game play. Students who repeat this course will improve skills through further instruction and practice.

PE-S 18-2 — Indoor Soccer
0.5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Indoor soccer skills, fundamentals and game play. Students who repeat this course will improve skills through further instruction and practice.

PE-S 19 — Team Sports
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Instruction in the skills, techniques, and strategies of game play in one or more team sports. Students who repeat this course will improve skills through further instruction and practice.

PE-S 19-2 — Team Sports
0.5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Instruction in the skills, techniques, and strategies of game play in one or more team sports. Students who repeat this course will improve skills through further instruction and practice.

PE-S 24A — Volleyball - Beginning
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Basic techniques and strategies of volleyball. Students who repeat this course will improve skills through further instruction and practice.

PE-S 24A-2 — Volleyball - Intermediate
0.5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Basic techniques and strategies of volleyball. Students who repeat this course will improve skills through further instruction and practice.

PE-S 24B — Volleyball - Intermediate
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Designed for individuals with previous experience in techniques and strategies of volleyball. Students who repeat this course will improve skills through further instruction and practice.

PE-S 24B-2 — Volleyball - Advanced
0.5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours activity.
Designed for individuals with previous experience in techniques and strategies of volleyball. Students who repeat this course will improve skills through further instruction and practice.

PE-S 24C — Volleyball - Advanced
1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours activity.
Designed for individuals with previous experience in advanced techniques and strategies of volleyball. Students who repeat this course will improve skills through further instruction and practice.
COURSE DESCRIPTIONS

PE 13 — Sports Officiating .5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
Introduction to rules, regulations and career opportunities of various teams and individual sports.

PE 24 — Kinesiology 2 Units
Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
The study of movement as it relates to exercise and the interrelationships of body segments involved in human movement activity, actions of joints, nerves and muscle exercise.

PE 34 — Fitness for Living 3 Units
Degree Appropriate, CSU, UC
Survey and analysis of the components of fitness and wellness. Effects of fitness on optimal health, well-being, concepts of human movement, fitness program design, stress management, nutrition and weight maintenance.

PE 38 — Physiology of Exercise for Fitness 3 Units
Degree Appropriate
Theory of basic physiological concepts as they pertain to exercise training and the prescription of individual fitness programs.

PE 39 — Techniques of Fitness Testing 2 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Theory and technique of fitness testing, assessment, evaluation, exercise program design. Includes related laboratory experience and practical applications.

PE 40 — Techniques of Teaching Cardiovascular Exercise 2 Units
Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Overview of the principles and techniques of teaching cardiovascular exercise. Includes both theory and practical instruction of cardiovascular exercise, special needs considerations, professional responsibilities and liabilities, group exercise design, treadmill, cycling and varieties of cardiovascular exercise.

PE 41 — Techniques of Teaching Weight Training 2 Units
Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
36.00 hours lecture.
Overview of the principles and techniques of teaching weight training. Includes muscle structure and function, training sequences, free weight and machine equipment, safety factors, including contraindications for exercise.

PE 44 — Theory of Coaching 3 Units
Degree Appropriate, CSU, UC
Designed for coaches at varying levels from youth league to high school varsity. Focuses on coaching issues and problems facing the coach today and includes the philosophy, theory, and principles of developing and maintaining an athletic program.

PE 48 — Lifeguard Training 3 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
Prerequisite: Ability to swim 500 yards without stopping
American Red Cross requirements for Lifeguard Training. To receive certification, students must pass written exams with a minimum of 80% and pass all practical skills tests. Students who meet all qualifications will be certified by the American Red Cross in Lifeguard Training, First Aid, and CPR for the Professional Rescuer.
PE 50 — Mt. Sac Fire Academy Physical Ability Entrance Exam 0.5 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
9.00 hours lecture.
9.00 hours activity.
Physical ability examination specifically designed for candidates seeking admission into the Mt. SAC Fire Academy. Candidates must be approved by the Fire Technology Office prior to registration. Students who repeat this course will improve skills through further instruction and practice.

PE 81 — Work Experience for Coaching 2 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for letter grade or Credit/No Credit.)
150.00 hours lab.
Provides coaches and physical education students with on-the-job experience in approved worksites related to classroom instruction. A minimum of 5 hours per week of supervised work (minimum 75 paid or 60 non-paid hours per semester) is required for each unit of credit. Work experience placement is not guaranteed, but assistance is provided by the Coaching Certificate faculty advisor. Students who repeat this course will improve skills through further instruction and practice.

PE 85 — Fitness Specialist Internship 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
75.00 hours lab.
Provides fitness specialist students with actual on-the-job skill development in fitness testing, analysis and prescription. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work experience placement is not guaranteed, but assistance is provided by the Fitness Certificate faculty advisor. Students who repeat this course will improve skills through further instruction and practice.

PE 92 — Work Experience - Athletic Training 2 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
160.00 hours lab.
Provides Athletic Trainer Aides and physical education students with actual on-the-job experience in an approved worksite related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Work experience placement is not guaranteed, but assistance is provided by the Athletic Trainer faculty and staff. Students who repeat this course will improve skills through further instruction and practice.

PHSIC 3 — Energy Science 4 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Advisory: Eligibility for MATH 51 and ENGL 68
Provides a broad technical understanding of the physical principles underlying the various forms of energy production, the role of energy in modern society, and an understanding of the wider environmental and societal impacts of different energy production technology choices. Course topics will include: fossils fuels, nuclear energy, hydro, wind, solar energy, biofuels, and energy distribution and storage. Field trips required.

PHSIC 7 — Physical Science 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Designed for the non-science major. A primarily non-mathematical, conceptual approach to basic principles of physics and chemistry and their practical applications. Critical thinking is stressed in such topics as motion, heat, electricity and magnetism, sound and light, radioactivity, atomic theory and modern physics. May be taken with Physical Sciences Laboratory for those students needing a laboratory science course.

PHSIC 7L — Physical Science Laboratory 1 Unit
150.00 hours lab. Degree Appropriate, CSU, UC
Corequisite: PHSIC 7
Laboratory topics will parallel the course content of Physical Science lecture.

PHYS 1 — Physics 4 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Prerequisite: MATH 51 or equivalent high school courses with a grade of “C” or better
Discovery of basic concepts of physics by working through guided activities in a workshop style. Topics include light and geometrical optics, electricity and DC circuits (with capacitors), linear and rotational motion, forces, momentum, energy, harmonic motion and waves.

PHYS 2AG — General Physics (CAN PHYS 2) 4 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Prerequisite: MATH 51 or equivalent high school courses with a grade of “C” or better
Prepares students for entrance into programs for the career of Physician Assistant. Examines and profiles community health care needs. Explores and directly allows students to interface with various patient populations. Requires weekend and overnight labs to various areas in California. Out-of-class projects required. Students who repeat this course will improve skills through further instruction and practice.

PHYS 2BG — General Physics (CAN PHYS 2) 4 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Prerequisite: MATH 51 or equivalent high school courses with a grade of “C” or better
Prepares students for entrance into programs for the career of Physician Assistant. Examines and profiles community health care needs. Explores and directly allows students to interface with various patient populations. Requires weekend and overnight labs to various areas in California. Out-of-class projects required. Students who repeat this course will improve skills through further instruction and practice.

PHYS 2AG + 2BG = CAN PHYS SEQ A 8 Units
108.00 hours lecture.
108.00 hours lab.
Prerequisite: High school trigonometry (C or better) or MATH 150
The basic principles of physics. Includes theory, applications, laboratory, and problem solving in mechanics, heat, fluids, and wave motion.

PHYS 28G — General Physics Spring Semester 4 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
54.00 hours lab.
Prerequisite: PHYS 2AG or equivalent
A continuation of PHYS 2AG. Includes electricity and magnetism (including DC and AC circuits), geometrical and physical optics, relativity, quantum physics, atomic and nuclear physics. Laboratory includes use of computers to analyze data and simulate electric circuits.
## Course Descriptions

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<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
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<tbody>
<tr>
<td>PHYS 4A</td>
<td>Engineering Physics</td>
<td>5</td>
<td>Studies linear and rotational motion, forces, momentum, work, energy, oscillations, gravitation, properties of solids, and waves. Includes laboratory experience, with significant use of computers for data acquisition and analysis.</td>
</tr>
<tr>
<td>PHYS 4B</td>
<td>Engineering Physics</td>
<td>5</td>
<td>Continuation of Physics 4A and 4B. Calculus-based course covering fluids, sound, electromagnetic waves, relativity, and modern physics.</td>
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<tr>
<td>PHYS 99</td>
<td>Special Projects in Physics</td>
<td>2</td>
<td>(May be taken four times for credit.) Various topics in physics.</td>
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## POLITICAL SCIENCE

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<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>POLI 1H</td>
<td>Political Science - Honors</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC</td>
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<tr>
<td>POLI 2</td>
<td>Political Science</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC</td>
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<tr>
<td>POLI 3</td>
<td>California State and Local Government</td>
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<td>Degree Appropriate, CSU</td>
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## PSYCHOLOGY

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<th>Title</th>
<th>Units</th>
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<tr>
<td>PSYC 1A</td>
<td>Introduction to Psychology</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC</td>
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<tr>
<td>PSYC 1B</td>
<td>Biological Psychology</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC</td>
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<tr>
<td>PSYC 3</td>
<td>Introduction to Research Methods in Psychology</td>
<td>4</td>
<td>Degree Appropriate, CSU, UC</td>
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PSYC 5 — Psychology of Reasoning and Problem Solving 3 Units
54.00 hours lecture. Degree Appropriate, CSU
The nature of critical thinking: models and strategies; common fallacies of reasoning; self-regulation in the thinking process; application of critical thinking to specific areas, such as comparison of cognitive and information-processing models; more specifically: memory, thinking and problem solving, creativity, learning and forgetting, decision making and reasoning.

PSYC 10 — Statistics for the Behavioral Sciences 4 Units
(CAN PSY 6) Degree Appropriate, CSU, UC
Prerequisite: PSYC 1A or SOC 1A and eligibility for MATH 110
Statistical principles of the behavioral sciences emphasizes research design, scales of measurement, distributions, graphing, descriptive statistics, measures of central tendency, measures of variability, z-test, independent and dependent t-tests, inferential statistics, confidence intervals, linear correlations and regressions, and analysis of variance, including multivariate factorial designs and chi square analyses. Statistical analyses through the use of computerized statistical packages are interpreted through lab experience.

PSYC 14 — Developmental Psychology 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Advisory: Eligibility for ENGL 1A
Examines the psychological principles of human development across the lifespan, from birth to death. This course does not fulfill the Title 22 requirements for Child Development majors.

PSYC 17 — Introduction to Human Services 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Advisory: PSYC 1A or PSYC 1AH or SOC 1 or SOC 1H
History, philosophy and development of human services in America. Explores careers in human services, self-exploration in matching personal and professional interests to entry levels of human services employment.

PSYC 19 — Abnormal Psychology 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: PSYC 1A or PSYC 1AH
Application of principles of general psychology to the field of psychopathology. Major classifications of psychiatric disorders, their causes and treatment modalities. Includes theoretical perspectives used in abnormal psychology.

PSYC 25 — The Psychology of Women 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Advisory: PSYC 1A and ENGL 1A taken prior or concurrently
A socio-cultural analysis of the role of gender in the experience of women. Students will examine psychological, sociological and biological factors and current scholarly research relating to women's gender identity, development, socialization, motivation, mental health, and relationships.

PSYC 26 — Psychology of Sexuality 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Explores the factors involved in establishing and maintaining intimate sexual relationships. The focus of the course is on the findings of social psychologists concerning sexuality and love relationships in our culture.

PSYC 33 — Psychology for Effective Living 3 Units
54.00 hours lecture. Degree Appropriate, UC
Emphasis on comprehensiveness and application of psychological principles to interpersonal relationships, personal growth, sexuality, vocation, marriage, parenting, aging, and other circumstances encountered in the life cycle. Considers personality development and psychological disorders as well as therapeutic approaches.

PSYC 40 — Introduction to Interviewing and Counseling 3 Units
54.00 hours lecture. Degree Appropriate
Provides a basic overview of the helping processes. Stresses application of counseling theories, helping skills, and consultation theories to allow exploration of self as a helper and learn facilitating skills to bring about change. Emphasis on establishing rapport, obtaining information and developing a supportive relationship in a variety of mental health settings. Students may not receive credit for both PSYC 40 and MENT 40.

PSYC 50 — Psychology of Human Relations 3 Units
54.00 hours lecture. Degree Appropriate
Prerequisite: Eligibility for ENGL 68
Develops students' understanding of themselves and their social relationships. Emphasizes self-evaluation, experience in small groups, becoming sensitive to one's own feelings and to the feelings of others and the contributions of the behavioral sciences as resources for effective living.

PSYC 99 — Special Projects in Psychology 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
Corequisite: Eligibility for ENGL 68
To offer selected students recognition for their academic interest and potential. Emphasis on comprehension and application of psychological principles to specialized projects. Students will be under the supervision of a faculty member.

PSYC 26 — Psychology of Sexuality 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Explores the factors involved in establishing and maintaining intimate sexual relationships. The focus of the course is on the findings of social psychologists concerning sexuality and love relationships in our culture.

R-TV 01 — Introduction to Broadcasting 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Corequisite: R-TV 01 and R-TV 11A (May have been taken previously)
Survey course of the film and electronic media industries, concentrating on the United States. This includes cultural, historical, social, legal and economic issues in motion pictures, radio and television broadcasting, cable, satellite, internet and related technologies.

R-TV 02 — On-Air Personality Development 3 Units
54.00 hours lecture. Degree Appropriate, CSU
Corequisite: R-TV 01 and R-TV 11A (May have been taken previously)
Developing a broadcast voice, style and understanding of the business for all areas of the industry, including disc jockey, newscaster and voice over artist. Students will also develop an understanding of the workings of voice and diction as they pertain to broadcasting and learn to evaluate the effectiveness of voice work done by others. Emphasis will also be placed on developing the content of on-air shows. Students will review the basics of the production studio and its components.

R-TV 02A — On-Air Personality Development-Spanish Market 3 Units
54.00 hours lecture. Non-Degree Credit
Corequisite: R-TV 01 and R-TV 11A (May have been taken previously)
Covers developing a broadcast voice, style and understanding of the business for all areas of Spanish-language broadcasting, including disc jockey, newscaster and voice over artist. Students will also develop an understanding of the workings of voice and diction as they pertain to broadcasting and learn to evaluate the effectiveness of voice work done by others. Emphasis will also be placed on developing the content of on-air shows suitable to the Spanish-language market. Students will review the basics of the production studio and its components. The course is taught in English.
## Course Descriptions

**R-TV 04 — Broadcast News Field Reporting**  
3 Units  
(May be taken two times for credit.)  
Degree Appropriate  
54.00 hours lecture.  
Corequisite: R-TV 01,  
R-TV 05, and R-TV 11A (May have been taken previously)  
Students will learn how to research and cover various news events  
including working with police and other emergency personnel,  
interviewing techniques and story developments. Emphasis will be  
placed on legal and ethical issues concerning news coverage. Students  
who repeat this course will improve skills through further instruction and  
practice.

**R-TV 05 — Radio-TV Newswriting**  
3 Units  
(May be taken two times for credit.)  
Degree Appropriate  
54.00 hours lecture.  
Corequisite: R-TV 01 (May have been taken previously)  
Writing, editing and reporting radio and TV news, utilizing the  
Associated Press Wire Service, AP Newsbss software. Students will  
rewrite news wire copy as well as create stories from interviews and  
from covering news events, including the incorporation and selection of  
sound bites from actualities. Emphasis will be on factual and concise  
content and the ability to work under deadline.

**R-TV 06 — Broadcast Traffic Reporting**  
1.5 Units  
27.00 hours lecture.  
Degree Appropriate  
Corequisite: R-TV 01 (May have been taken previously)  
The history and development of the techniques involved in radio and  
television traffic reporting through lecture and hands-on practice.  
Students will learn how to interpret and read police codes as they relate  
to traffic, accidents, and emergency situations and understand both  
broadcast rules and liabilities as they apply to traffic reporting.  
Emphasis on both the production and the delivery of reports. Students  
will work at the college radio station one hour per week delivering  
traffic reports during news broadcasts.

**R-TV 07 — Commercial Voice-Overs**  
3 Units  
54.00 hours lecture.  
Degree Appropriate  
Advisory: R-TV 01  
Covers the development of voices for radio and television commercials,  
narrations, and animation. Students also learn how to effectively  
audition, work with agents and agencies, and understand voice-over  
contracts.

**R-TV 08 — KSAR Radio Studio Operations**  
2 Units  
(May be taken two times for credit.)  
Degree Appropriate, CSU  
36.00 hours lecture.  
Corequisite: R-TV 01 (May have been taken previously)  
A training course for positions at Mt. SAC's on-campus radio station,  
KSAR. Includes programming, production procedures, news, DJ and  
promotions, and FCC rules and regulations. Recommended for students  
wanting to become a part of KSAR and also offers an excellent overview  
of the components of a professional radio station. Students who repeat  
this course will improve skills through further instruction and practice.

**R-TV 09 — Broadcast Sales and Promotion**  
3 Units  
54.00 hours lecture.  
Degree Appropriate  
Corequisite: R-TV 01 (May have been taken previously)  
Covers the strategies and legalities of advertising time sales for radio and  
television including FCC requirements, demographic targeting, marketing  
strategies, and working with agencies. The course also covers promotions,  
including the creation of contests and promotional campaigns.

**R-TV 10 — Radio Management and Programming**  
3 Units  
54.00 hours lecture.  
Degree Appropriate  
Corequisite: R-TV 01 (May have been taken previously)  
An overview of the various techniques of programming a radio station,  
including various formats of music, news, talk and sports. Students will  
also look at the role of management at a station including budgeting,  
unions, ratings and FCC responsibilities.

**R-TV 11A — Beginning Radio Production**  
3 Units  
36.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Corequisite: R-TV 01 (May have been taken previously)  
Operation of standard radio production equipment for both tape-based  
and digital production utilizing ProTools technology. Production skills  
concentrate on the use of voice, music and sound effects applied to a  
variety of elements including commercials and newscasts.

**R-TV 11B — Advanced Radio Production**  
3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
Prerequisite: R-TV 11A  
Build upon the basic understanding of linear and non-linear recording,  
editing, and mixing as learned in R-TV 11A. Develop an understanding  
of the core concepts and skills required to work in a professional  
recording studio environment using Pro Tools, the industry standard for  
state of the art digital work stations.

**R-TV 12 — Commercial Copywriting**  
3 Units  
54.00 hours lecture.  
Degree Appropriate  
Advisory: R-TV 01  
Covers the creation and production of radio and television commercials.  
Includes using demographic research to target specific audiences, truth  
in advertising, slogan and campaign development, character creation,  
commercial formats, and the use of visual and audio appeals.

**R-TV 15 — Broadcast Business Practices**  
3 Units  
54.00 hours lecture.  
Degree Appropriate  
Corequisite: R-TV 01 (May have been taken previously)  
A basic overview of the radio and television industry as a business for  
profit. Basic techniques are discussed and examined in negotiating with  
station management and agents as well as dealing with contracts,  
residuals, re-use rights, mergers, protection of intellectual properties,  
union representation and FCC law. professional ethics and broadcasters'  
responsibilities to their audiences are also discussed.

**R-TV 16 — Broadcast Career Preparation**  
3 Units  
(May be taken two times for credit.)  
Degree Appropriate  
54.00 hours lecture.  
Prerequisite: R-TV 11A or R-TV 19A  
Corequisite: R-TV 97A and R-TV 97B or R-TV 98A and R-TV 98B (May  
have been taken previously)  
Students taking this class will prepare their audio and/or video demo  
tapes and resumes in order to obtain and maintain an entry-level job in  
the broadcast industry. Emphasis will be placed on employment  
searches, interview techniques, involvement in professional  
organizations and business strategies. Students who repeat this course  
will improve skills through further instruction and practice.

**R-TV 17 — Internet Radio and Podcasting**  
3 Units  
54.00 hours lecture.  
Degree Appropriate  
Corequisite: R-TV 01 and R-TV 11A (May have been taken previously)  
Covers all aspects of Internet broadcasting and podcasting including  
programming, announcing, promotions, and legal and copyright issues  
troughout the use of an actual Internet radio station.

**R-TV 18 — Writing for Television/Film**  
3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
Advisory: R-TV 01  
Characterization, visualization, structure and form in various types of  
writing for television and motion picture production.

**R-TV 19A — Beginning Television Production**  
3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
54.00 hours lab.  
Corequisite: R-TV 01 (May have been taken previously)  
Basic video production using studio, remote multicamera, and film-style  
techniques.

**R-TV 19B — Advanced Television Production**  
3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
54.00 hours lab.  
Prerequisite: R-TV 19A  
Advanced video production techniques emphasizing film-style  
aesthetics and production.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-TV 20</td>
<td>Television News Production</td>
<td>3</td>
<td>Offered Fall Semester. Degree Appropriate. 54.00 hours lecture. Prerequisite: R-TV 05 or R-TV 11A or R-TV 19A. Advisory: BUSL 11 or BUSL 25. TV news writing using writing, announcing, production, direction, graphics, and editing skills both in and out of the studio. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 21</td>
<td>Remote Television Production and Engineering</td>
<td>3.5</td>
<td>Offered Spring Semester. Degree Appropriate. 54.00 hours lecture. Prerequisite: R-TV 19A. Students learn remote video production using both multi-camera and single camera techniques. Topics include video engineering, directing, and remote production truck setup. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 22</td>
<td>Editing for Film and Television</td>
<td>3</td>
<td>Offered Spring Semester. Degree Appropriate. Aesthetics and use of non-linear editing software for film and television. 54.00 hours lecture. Prerequisite: R-TV 01. Students learn to edit video and audio, working with non-linear editing software. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 26</td>
<td>Current Issues in Entertainment Law</td>
<td>3</td>
<td>Offered Spring Semester. Degree Appropriate. 54.00 hours lecture. Advisory: BUSL 01 or BUSL 30. Overview of the major legal and FCC regulatory issues facing broadcasting, cable and satellite operators. Also covers the growing importance of intellectual property law as it applies to digital media and the Internet.</td>
</tr>
<tr>
<td>R-TV 27</td>
<td>Radio Drama</td>
<td>3</td>
<td>Offered Spring Semester. Degree Appropriate. 54.00 hours lecture. Prerequisite: R-TV 07. The practical and artistic skills needed for the performance of radio drama such as voicing, directing, writing and sound design combined with broadcasting history and communication theory. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 30</td>
<td>RTV30 Introduction to Careers in Entertainment</td>
<td>2</td>
<td>Offered Fall Semester. Non-Degree Credit. 32.00 hours lecture. An overview of broadcasting as a potential career. Examines the skills and training needed to work in radio, television and film in such areas as O-J, news anchor/reporter, sports reporter, commercial voice-over artist, production director, writer, producer and director.</td>
</tr>
<tr>
<td>R-TV 95C</td>
<td>Radio Station Activities</td>
<td>3</td>
<td>Offered Spring Semester. Degree Appropriate. (May be taken four times for credit.) 162.00 hours lab. Prerequisite: R-TV 01, R-TV 02, and R-TV 11A. Corequisite: R-TV 97A. Regular and continuing experience in the operation of the college radio station, KSAS. Students may select roles in the radio operation involving on-air announcing, production, programming and news. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 97A</td>
<td>Radio/Entertainment Industry Seminar</td>
<td>1</td>
<td>Offered Spring Semester. Degree Appropriate. 18.00 hours lecture. Prerequisite: R-TV 01 and any other three R-TV units. Corequisite: R-TV 97A. A capstone class for students preparing for a career in the radio/entertainment industry. Students share and critique experiences emphasizing professionalism and problem-solving techniques related to their internship experience. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 97B</td>
<td>Radio/Entertainment Industry Internship</td>
<td>1</td>
<td>Offered Spring Semester. Degree Appropriate. (May be taken four times for credit.) 75.00 hours lab. Prerequisite: R-TV 01 and any other three R-TV units. Corequisite: R-TV 97B. Provides the student with on-the-job experience in the radio/entertainment industry in order to strengthen and broaden his/her skills in the workplace. A minimum of 75 paid or 60 non-paid clock hours per sememter of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 98A</td>
<td>Television and Film/Entertainment Industry Seminar</td>
<td>1</td>
<td>Offered Spring Semester. Degree Appropriate. 18.00 hours lecture. Prerequisite: R-TV 01 and R-TV 19A. Corequisite: R-TV 98A. A capstone class for students preparing for a career in Television or Film Production. Students share and critique experiences emphasizing professionalism and problem-solving techniques related to their internship experience. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 98B</td>
<td>Television and Film/Entertainment Industry Internship</td>
<td>1</td>
<td>Offered Spring Semester. Degree Appropriate. 75.00 hours lab. Prerequisite: R-TV 01 and R-TV 19A. Corequisite: R-TV 98B. Provides the student with actual on-the-job experience in television or film production in order to strengthen and broaden his/her skills in the workplace. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 97D</td>
<td>KSAS Radio/Internet Radio Internship</td>
<td>2</td>
<td>Offered Spring Semester. Degree Appropriate. 150.00 hours lab. Prerequisite: R-TV 11A. Corequisite: R-TV 01 and R-TV 02. Regular and continuing experience in the operation of the College radio station or the college Internet station. Students may select roles involving on-air announcing, production, programming and news. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 98A</td>
<td>Television and Film/Entertainment Industry Seminar</td>
<td>1</td>
<td>Offered Spring Semester. Degree Appropriate. 18.00 hours lecture. Prerequisite: R-TV 01 and R-TV 19A. Corequisite: R-TV 98A. A capstone class for students preparing for a career in Television or Film Production. Students share and critique experiences emphasizing professionalism and problem-solving techniques related to their internship experience. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 98B</td>
<td>Television and Film/Entertainment Industry Internship</td>
<td>1</td>
<td>Offered Spring Semester. Degree Appropriate. 75.00 hours lab. Prerequisite: R-TV 01 and R-TV 19A. Corequisite: R-TV 98B. Provides the student with actual on-the-job experience in television or film production in order to strengthen and broaden his/her skills in the workplace. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. It is recommended that the hours per week be equally distributed throughout the semester. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>R-TV 99</td>
<td>Radio/TV Special Projects</td>
<td>2</td>
<td>Offered Spring Semester. Degree Appropriate. 36.00 hours lecture. Prerequisite: Completion of six R-TV units. To offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced.</td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

R-TC 10A — Work Experience in Film and TV 1 Unit
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
50.00 hours lab.
Prerequisite: Completion of 12 Television or Film course units or the equivalent.
Provides students with on-the-job experience in the film or TV industry, related to classroom instruction, at an approved work site. A minimum of 60 unpaid or 75 paid hours of supervised work is required for each unit of credit. Students who repeat this course will improve skills through further experience.

R-TC 100B — Work Experience in Film and TV 2 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
150.00 hours lab.
Prerequisite: Completion of 12 television or film course units or the equivalent.
Provides students with on-the-job experience in the film or TV industry, related to classroom instruction, at an approved work site. A minimum of 60 unpaid or 75 paid hours of supervised instruction work is required for each unit of credit. Students who repeat the course will improve skills through further experience.

R-TC 100C — Work Experience in Film and TV 3 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
325.00 hours lab.
Prerequisite: Completion of 12 Television or Film course units or the equivalent.
Provides students with on-the-job experience in the film or TV industry, related to classroom instruction, at an approved work site. A minimum of 60 unpaid or 75 paid hours of supervised instruction work is required for each unit of credit. Students who repeat the course will improve skills through further experience.

RAD 31 — Fluoroscopy 2 Units
Spring Semester Degree Appropriate
36.00 hours lecture.
Corequisite: RAD 64
Advisory: RAD 55B
Components and characteristics of fluoroscopic systems including regulatory requirements for operation. Includes quality control and quality assurance systems relative to radiology.

RAD 32 — Digital Imaging in Radiology 2 Units
Winter Semester Degree Appropriate
36.00 hours lecture.
Imparts an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving and retrieval discussed. Guidelines for selecting exposure factors and evaluating images within a digital system assist students to bridge between film-based and digital imaging systems. Principles of digital system quality assurance and maintenance presented.

RAD 33 — Radiologic Technology 3 Units
Summer Semester Degree Appropriate, CSU
54.00 hours lecture.
Prerequisite: Admission to the Radiologic Technology Program, MATH 51, and CHEM 10 or equivalent
Corequisite: RAD 91
Subjects related to the hospital environment: radiation protection, darkroom technique, general principles of x-ray production and production of the radiograph. Introduces the student to professional ethics and the legal considerations of health care.

RAD 34 — Techniques of Radiologic Technology 4.5 Units
Fall Semester Degree Appropriate, CSU
236.00 hours lab.
Prerequisite: RAD 61A
Corequisite: RAD 62A
Continued experience in an affiliated hospital under guidance of clinical personnel and college instructors. Emphasis on abdominal and thoracic viscera, spine, common contrast exams, and generalized skull radiography.

RAD 35 — Techniques of Radiologic Technology 5 Units
Spring Semester Degree Appropriate, CSU
256.00 hours lab.
Prerequisite: RAD 62A
Continued experience in a hospital setting under guidance of clinical personnel and college instructors. Emphasis on skull, portable radiography, surgical studies and the development of nursing skills as it relates to radiologic technology.

RAD 35A — Techniques of Radiologic Technology 7 Units
Summer Semester Degree Appropriate, CSU
360.00 hours lab.
Corequisite: RAD 63
Prerequisite: RAD 62A
Practical experience in an affiliated hospital under guidance of clinical personnel and college instructors. Emphasis on cystograms, urethrogram, foreign body localization, tomography, and venography.

RAD 35B — Techniques of Radiologic Technology 2.5 Units
Winter Semester Degree Appropriate, CSU
140.00 hours lab.
Prerequisite: RAD 55A
Continued experience in a hospital setting under guidance of clinical personnel and college instructors. Emphasis on E.R.C.P., sialogram, retrograde and other advanced procedures.

RAD 36 — Techniques of Radiologic Technology 7 Units
Spring Semester Degree Appropriate, CSU
380.00 hours lab.
Corequisite: RAD 64
Practical experience in an affiliated hospital under guidance of clinical personnel and college instructors. Emphasis on basic vascular procedures (angiograms), mammograms, tube placement, myelograms, arthograms, and hysterosalpingograms.
RAD 61A — Theory of Radiologic Technology 4 Units
Fall Semester Degree Appropriate, CSU
72.00 hours lecture.
Prerequisite: RAD 50, MEDI 90
Corequisite: RAD 52A, RAD 61B, RAD 61C
Concepts of radiation, fundamentals of physics, the atom, electromagnetic radiation, electricity and magnetism, electromagnetic, the X-ray machine and fluoroscopic equipment and procedures.

RAD 61B — Radiographic Positioning 3 Units
Fall Semester Degree Appropriate, CSU
54.00 hours lecture.
Corequisite: RAD 61A
Fundamentals of radiographic positioning of the upper and lower extremities, standard chest and abdomen; to include general radiologic anatomy, terminology, radiation protection, and ethics.

RAD 61C — Radiologic Technology Seminar 1 Unit
Fall Semester Degree Appropriate, CSU
18.00 hours lecture.
18.00 hours lab.
Corequisite: RAD 61A
Analysis of the technical performance of producing radiographs of the chest, upper and lower extremities, and KUB. Documentation of radiographic exposure techniques.

RAD 62A — Theory of Radiologic Technology 4 Units
Spring Semester Degree Appropriate, CSU
72.00 hours lecture.
Prerequisite: ANAT 10A, RAD 61A
Corequisite: RAD 53, RAD 62B, RAD 62C
Areas of X-ray production and interaction with matter, X-ray emissions, beam restricting devices, grids, film processing, screens, radiographic quality and special equipment/accessories and procedures.

RAD 62B — Radiographic Positioning 3 Units
Spring Semester Degree Appropriate, CSU
54.00 hours lecture.
Corequisite: RAD 62A
Fundamentals of radiographic positioning of the abdomen, digestive and urinary systems, thorax, vertebral column, general cranial, facial and introduction to temporal bone radiography (mastoid and TMJ), to include radiologic anatomy, terminology, radiation protection, pediatrics and ethics.

RAD 62C — Radiologic Technology Seminar 1 Unit
Spring Semester Degree Appropriate, CSU
18.00 hours lecture.
18.00 hours lab.
Prerequisite: RAD 62A
Advanced analysis of the technical performance of radiographic examination of the vertebral column, bony thorax, digestive system, urinary system, abdomen and general cranial radiography.

RAD 63 — Theory of Radiologic Technology 4 Units
72.00 hours lecture.
Prerequisite: RAD 54
Corequisite: RAD 50, RAD 55
Special radiographic studies, contrast media usage and radiographic pathlogy. Includes principles of radiation protection and radiobiology.

RAD 64 — Theory of Radiologic Technology 4 Units
72.00 hours lecture.
Prerequisite: RAD 63
Corequisite: RAD 31, RAD 56
An analytical review of the radiologic technology core courses. Serves as preparation for State Certification and National Registry Exams.

RAD 65 — Speed Reading: Methods and Applications 1 Unit
18.00 hours lecture.
Prerequisite: READ 60 or satisfactory score on reading placement test
Designed to increase reading speed, while maintaining comprehension of college-level material. Improve concentration and recall. Develop flexibility in reading rate.

RAD 66 — Improving Reading Comprehension 3 Units
May be taken two times for credit.
Pre-Collegiate
Prerequisite: SAT 10A, SAT 10B, CHEM 10 or one year of General High School Chemistry, MATH 51, MEDI 90
Corequisite: RESD 51A, RESD 52
Introduction to the process of reading. Students who repeat this course will improve skills through further instruction and practice.

REF 80 — Developing Reading Comprehension 3 Units
May be taken two times for credit.
Pre-Collegiate
Prerequisite: READ 70 or satisfactory score on reading placement test
Further development of reading comprehension and vocabulary strategies including self-awareness of reading capabilities. Students who repeat this course will improve skills through further instruction and practice.

RESD 50 — Theory and Principles of Respiratory Therapy 2 Units
Fall Semester Degree Appropriate, CSU
36.00 hours lecture.
Prerequisite: ANAT 10A, ANAT 10B, CHEM 10 or one year of General High School Chemistry, MATH 51, MEDI 90
Corequisite: RESD 51A, RESD 52
Properties of liquids, gases, kinetic theory of gases, units of measurements, gas laws, lung mechanics, flow of fluids, and pressure measuring devices used in respiratory therapy.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Semester</th>
<th>Degree Appropriate</th>
<th>Prerequisite</th>
<th>Corequisite</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Notes</th>
</tr>
</thead>
</table>
| RESD 51A         | Respiratory Therapy Science                      | 4     | Fall           | Degree Appropriate, CSU   | Corequisite: RESD 50, RESD 52  
Anatomic alterations of the lungs, etiology, overview of the cardiopulmonary clinical manifestations, and general management of commonly encountered cardiopulmonary diseases. |             | 54.00          | 3.00        |       |
| RESD 51B         | Respiratory Therapy Science                      | 4     | Spring         | Degree Appropriate, CSU   | Corequisite: RESD 53 and RESD 60  
Basic principles of respiratory therapy equipment. Emphasis on methods of administration of therapy and application of specialized equipment in the clinical setting. |             | 54.00          | 3.00        |       |
| RESD 52          | Pulmonary Anatomy and Physiology                 | 3     | Fall           | Degree Appropriate, CSU   | Corequisite: RESD 51A, RESD 50  
Anatomy and physiology of the cardiopulmonary, neurologic, and renal systems emphasizing clinical application of physiological concepts. |             | 54.00          | 2.00        |       |
| RESD 53          | Cardiopulmonary Pathophysiology                  | 3     | Spring         | Degree Appropriate, CSU   | Corequisite: RESD 51B  
Anatomic alterations of the lungs, etiology, overview of the cardiopulmonary clinical manifestations, and general management of commonly encountered cardiopulmonary diseases. |             | 54.00          | 2.00        |       |
| RESD 55          | Adult Respiratory Intensive Care                 | 3     | Fall           | Degree Appropriate, CSU   | Corequisite: RESD 56B-1  
Provides an in-depth approach to the current modalities and monitoring tools of respiratory care. Emphasis is on the adult patient who is critically ill with primary and/or secondary cardiopulmonary failure. |             | 54.00          | 2.00        |       |
| RESD 56A-1       | Techniques of Respiratory Therapy                | 2.5   | Summer         | Degree Appropriate, CSU   | Corequisite: RESD 57B  
Clinical practice in intensive care and mechanical ventilator procedures in the treatment of adult and pediatric patients requiring respiratory care are introduced. |             | 14.00          | 2.00        |       |
| RESD 56B         | Techniques of Respiratory Therapy                | 6     | Fall           | Degree Appropriate, CSU   | Corequisite: RESD 55, RESD 58  
Clinical practice in the hospital setting. The student is expected to perform basic therapeutic modalities mastered in RESD 51A and apply concepts learned in the first three semesters of the Respiratory Therapy Program. Instruction in the application of therapeutic modalities and diagnostic procedures performed in the management and treatment of adult and pediatric patients requiring respiratory care are introduced. |             | 384.00         | 6.00        |       |
| RESD 56C         | Techniques of Respiratory Therapy                | 2.5   | Winter         | Degree Appropriate, CSU   | Corequisite: RESD 55  
Clinical practice in the hospital setting. Continued practice of intensive care and mechanical ventilator procedures in the treatment of adult and pediatric patients. |             | 14.00          | 2.00        |       |
| RESD 56D-1       | Techniques of Respiratory Therapy                | 6     | Spring         | Degree Appropriate, CSU   | Corequisite: RESD 59, RESD 61  
Clinical practice in the hospital setting. Application of therapeutic modalities and diagnostic procedures performed in the management and treatment of adult and pediatric intensive care patients. A six-week rotation is done in the neonatal intensive care unit. The student is expected to perform basic therapeutic modalities mastered in RESD 51A and apply concepts learned in the first four semesters of the Respiratory Therapy Program. |             | 384.00         | 6.00        |       |
| RESD 57A         | Special Procedures for Respiratory Care          | 1.5   | Summer         | Degree Appropriate, CSU   | Corequisite: RESD 56A  
Topics in the basic application of and skills development in bronchoscopy, blood drawing and analysis. |             | 27.00          | 2.00        |       |
| RESD 57B         | Special Procedures for Respiratory Care          | 1.5   | Winter         | Degree Appropriate, CSU   | Corequisite: RESD 56A  
Topics in the basic application of and skills development in bronchoscopy, blood drawing and analysis. |             | 27.00          | 2.00        |       |
| RESD 58          | Neonatal Intensive Care                          | 3     | Fall           | Degree Appropriate, CSU   | Corequisite: RESD 56B-1, RESD 55  
Emphasizes neonatal pathophysiologies, etiologies, and ramifications. Encompasses the newest techniques in monitoring equipment used in the treatment and maintenance of the premature infant. Designed primarily for respiratory therapists and nurses. |             | 54.00          | 3.00        |       |
**Course Descriptions**

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>RESD 59</td>
<td>Respiratory Therapeutic Modalities 3 Units</td>
</tr>
<tr>
<td>SL 2</td>
<td>Linked Service Learning 1 Unit</td>
</tr>
<tr>
<td>SL 3</td>
<td>Service Learning/Seminar in Community Involvement 3 Units</td>
</tr>
<tr>
<td>SL 4</td>
<td>Service Learning and Community Involvement 1 Unit</td>
</tr>
<tr>
<td>SL 5</td>
<td>Special Projects in Service Learning 1 Unit</td>
</tr>
<tr>
<td>SIGN 99</td>
<td>Special Projects in Sign Language/Interpreting 2 Units</td>
</tr>
<tr>
<td>SIGN 102</td>
<td>American Sign Language 2 4 Units</td>
</tr>
<tr>
<td>SIGN 104</td>
<td>American Sign Language 4 4 Units</td>
</tr>
<tr>
<td>SIGN 105</td>
<td>American Sign Language 5 4 Units</td>
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<tr>
<td>SIGN 109</td>
<td>Fingerspelling 2 Units</td>
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<tr>
<td>SIGN 201</td>
<td>Deaf Perspectives 3 Units</td>
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<tr>
<td>SIGN 202</td>
<td>American Deaf Culture 3 Units</td>
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</tbody>
</table>

**SERVICE LEARNING**

- **SL 1** — Service Learning/Seminar for Health Occupations 6 Units
- **SL 2** — Linked Service Learning 1 Unit
- **SL 3** — Service Learning/Seminar in Community Involvement 3 Units
- **SL 4** — Service Learning and Community Involvement 1 Unit
- **SL 5** — Special Projects in Service Learning 1 Unit
- **SIGN 99** — Special Projects in Sign Language/Interpreting 2 Units
- **SIGN 102** — American Sign Language 2 4 Units
- **SIGN 104** — American Sign Language 4 4 Units
- **SIGN 105** — American Sign Language 5 4 Units
- **SIGN 109** — Fingerspelling 2 Units
- **SIGN 201** — Deaf Perspectives 3 Units
- **SIGN 202** — American Deaf Culture 3 Units

**SIGN LANGUAGE, INTERPRETING**

- **SIGN 201** — Deaf Perspectives 3 Units
- **SIGN 202** — American Deaf Culture 3 Units
## Course Descriptions

### SIGN 210 — American Sign Language Structure 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: SIGN 103
Linguistic structure of American Sign Language, including phonology, morphology and syntax. Sociolinguistic issues will also be discussed.

### SIGN 220 — Translation: American Sign Language/English 3 Units
(May be taken three times for credit.) Degree Appropriate, CSU
54.00 hours lecture.
Prerequisite: SIGN 104
Corequisite: SIGN 210
American Sign Language and English translation by comparing texts in both languages. Students who repeat this course will improve skills through further instruction and practice.

### SIGN 223 — Principles of Interpreting 3 Units
54.00 hours lecture. Degree Appropriate
Prerequisite: SIGN 102, Eligibility for English 1A
Covers various aspects of interpreting theory and process including the history of sign language interpreting. Examines the interpreter’s role and ethical standards.

### SIGN 225 — Ethical Decision Making for Interpreters 2 Units
36.00 hours lecture. Degree Appropriate
Prerequisite: SIGN 223
Development of ethical decision-making skills through the analytical construct of the Demand/Control Schema for interpreting work. Topics include professional work effectiveness and professional wellness.

### SIGN 227 — Cognitive Processing for Interpreters 4 Units
(May be taken three times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
54.00 hours lab.
Prerequisite: SIGN 104, SIGN 223, Engl 1A
The development of cognitive processing skills necessary for interpreting between ASL and English. Constructing and deconstructing meaning, memory, listening and attending will be covered. Includes memory building, restating, cloze, and listening exercises.

### SIGN 231 — Interpreting 4 Units
Fall Semester Degree Appropriate
(May be taken three times for credit.)
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
54.00 hours lab.
Prerequisite: SPCH 1A and SIGN 227
Skill development in interpreting from American Sign Language (ASL) to English and English to ASL, focusing on interpreting in the consecutive mode. Processing skills and task management will be emphasized. Students who repeat this course will improve their skill and better prepare themselves for a higher level interpreting course.

### SIGN 232 — Advanced Interpreting 4 Units
(May be taken three times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54.00 hours lecture.
54.00 hours lab.
Prerequisite: SIGN 231
Refines interpreting skills with emphasis on simultaneous interpreting. Intensive skill development in interpreting from English to American Sign Language (ASL) and ASL to English. Students who repeat this course will improve their skill and better prepare themselves for entry-level job placement.

### SIGN 238 — Oral Transliteration 3 Units
(May be taken two times for credit.) Degree Appropriate
54.00 hours lecture.
Learn skills to facilitate communication for Deaf and hard-of-hearing people who use speechreading and speech to communicate. Students who repeat this course will improve skills through further instruction and practice.

### SIGN 240 — Vocabulary Building for Interpreters 2 Units
(May be taken two times for credit.) Degree Appropriate
54.00 hours lecture.
Prerequisite: SIGN 104
Vocabulary expansion in both ASL and English with the goal of improving interpretations between these two languages. The course will focus on context, semantics, and parts of speech in determining culturally appropriate vocabulary choices. Interpreting students will learn to apply their growing vocabularies to ASL-English interpretations. Students who repeat this course will improve skills through further instruction and practice.

### SIGN 250 — Interpreting with Classifiers 1.5 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
18.00 hours lecture.
27.00 hours lab.
Prerequisite: SIGN 104, SIGN 210
An overview of the common forms of ASL classifier predicates. Developing skill in establishing figure/ground, visualization, and shifting perspectives. Applying classifier predicates within the context of interpreting from English into American Sign Language.

### SIGN 260 — Video Interpreting 1.5 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
18.00 hours lecture.
27.00 hours lab.
Prerequisite: SIGN 231
Video interpreting and skill development as a video interpreter. Includes video relay interpreting (VRS), video remote interpreting (VRI), technical components used in video interpreting, and ethical consideration of the video interpreter. Lab portion of the course will focus on skill development in video interpreting.

### SOC 1 — Sociology 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
A systematic study of human relations and social structures which emphasizes the interaction between personality, culture and society. Special consideration is given to an understanding of group behavior, personality formation, social organization, and social change.

### SOC 1H — Sociology - Honors 3 Units
54.00 hours lecture. Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
A systematic study of human relations and social structures which emphasizes the interaction between personality, culture and society. Special consideration is given to an understanding of group behavior, personality formation, social organization, and social change. An honors course designed to provide an enriched experience. Students may not receive credit for both SOC 1 and SOC 1H.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 2H — Sociology - Honors</td>
<td>3 Units</td>
<td>Degree Appropriate, CSU, UC Prerequisite: Acceptance into the Honors Program The application of basic sociological principles and concepts to the study and understanding of social problems. Special emphasis on the analysis of social values, social organization, role, status and stress, and also on the study of controversial public issues that arise in contemporary American society. Students will be encouraged to evaluate and discuss both the theoretical and practical approaches to social problems. Individual student projects will be undertaken. An honors course designed to provide an enriched experience. Students may not receive credit for both SOC 2 and SOC 2H.</td>
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<tr>
<td>SOC 4 — Introduction to Gerontology</td>
<td>3 Units</td>
<td>Degree Appropriate, CSU, UC Explores the characteristics, life circumstances, and problems of people as they progress through life. Emphasizes theoretical perspectives on the process of aging and the adjustment to aging. Covers sociological factors and social institutions that affect life chances throughout the life cycle. Analyzes and explores the sociological concepts of age, aging, and the aged.</td>
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<tr>
<td>SOC 5 — Introduction to Criminology</td>
<td>3 Units</td>
<td>Degree Appropriate, CSU, UC A scientific analysis of the nature, extent, and causes of violations of societal rules of behavior that are formally defined as crime and delinquency. Includes an analysis of the theoretical perspectives of the sociology of deviance on the criminal justice system and the impact of crime on society.</td>
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<tr>
<td>SOC 5H — Introduction to Criminology - Honors</td>
<td>3 Units</td>
<td>Degree Appropriate, CSU, UC Prerequisite: Acceptance into the Honors Program A scientific analysis of the nature, extent, and causes of violations of societal rules of behavior that are formally defined as crime and delinquency. Includes an analysis of the theoretical perspectives of the sociology of deviance on the criminal justice system and the impact of crime on society. An honors course designed to provide an enriched experience. Students may not receive credit for both SOC 5 and SOC 5H.</td>
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<tr>
<td>SOC 14 — Marriage and the Family</td>
<td>3 Units</td>
<td>Degree Appropriate, CSU, UC Prerequisite: Eligibility for ENGL 68 Explores the sociological and psychological functions of dating, engagement, weddings, marriage, and the family. Focuses on influences and theories of mate selection, love, and interpersonal attraction. Covers trends and changes in marriage and the family and gender roles. Explores different types of families and family patterns. Covers factors leading to divorce and influences on the divorce rate, remarriage rate, and step-families. Explores family life-cycle adjustments including parenthood, mid-life, grandparenthood, and widowhood. Analyzes characteristics of &quot;successful&quot; marriages and families.</td>
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<tr>
<td>SOC 15 — Child Development</td>
<td>3 Units</td>
<td>Degree Appropriate, CSU, UC Theoretical aspects of physical, social, emotional and cognitive development from conception through adulthood. Requires observation of children.</td>
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<tr>
<td>SOC 20 — Sociology of Ethnic Relations</td>
<td>3 Units</td>
<td>Degree Appropriate, CSU, UC Prerequisite: Acceptance into the Honors Program Provides insight to the culture diversity that exists in the United States. An extensive study of four major ethnic groups (Blacks, Asians, Native Americans, and Latinos) is provided with emphasis placed on historical experiences, contemporary circumstances and future trends. Origins and theories of stereotypes, prejudices and discrimination are explored along with an analysis of racial stratification.</td>
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<tr>
<td>SOC 99 — Special Projects in Sociology</td>
<td>2 Units</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU 36.00 hours lecture. Offers selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced.</td>
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<tr>
<td>SPAN 1 — Elementary Spanish</td>
<td>4 Units</td>
<td>Degree Appropriate, CSU, UC (CAN SPAN 2) Development of the ability to converse, read and write in Spanish. Includes essentials of pronunciation, vocabulary, idioms and grammatical structures along with an introduction to Hispanic culture. Intended for students without previous exposure to Spanish.</td>
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<tr>
<td>SPAN 2 — Continuing Elementary Spanish</td>
<td>4 Units</td>
<td>Degree Appropriate, CSU, UC (CAN SPAN 4) Degree Appropriate, CSU, UC SPAN 1+2 = CAN SPAN SEQ A 72.00 hours lecture. Prerequisite: SPAN 1 or SPAN 1H or two years of high school Spanish or equivalent. Further development of conversational, reading and writing skills in Spanish with special emphasis on verbs, grammar and expansion of vocabulary. Further study of Hispanic culture.</td>
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<tr>
<td>SPAN 3 — Intermediate Spanish</td>
<td>4 Units</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 72.00 hours lecture. Prerequisite: SPAN 2 or equivalent Further development of communicative proficiency in Spanish. Further study and review of grammar, increasing emphasis on reading and writing as tools in exploring Hispanic civilization.</td>
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<tr>
<td>SPAN 4 — Continuing Intermediate Spanish</td>
<td>4 Units</td>
<td>Degree Appropriate, CSU, UC (CAN SPAN10) Degree Appropriate, CSU, UC SPAN 3+4 = CAN SPAN SEQ B (May be taken for option of letter grade or Credit/No Credit.) 72.00 hours lecture. Prerequisite: SPAN 3 or SPAN 3H or equivalent Emphasis on increased proficiency in speaking, reading and writing Spanish. Review of grammar, increased vocabulary building. Readings and discussions on Hispanic cultural topics. Introduction to Hispanic literature.</td>
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<tr>
<td>SPAN 5 — Advanced Spanish</td>
<td>4 Units</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 72.00 hours lecture. Prerequisite: SPAN 4 or equivalent Emphasis is placed on increased proficiency in speaking, reading and writing Spanish. Cultural insights are developed through videos, movies and readings in Hispanic culture through different literary genres.</td>
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<tr>
<td>SPAN 6 — Continuing Advanced Spanish</td>
<td>4 Units</td>
<td>Degree Appropriate, CSU, UC (CAN SPAN15) Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 72.00 hours lecture. Prerequisite: SPAN 5 or equivalent Advanced reading, discussing and writing in Spanish designed to provide further cultural insights into the Hispanic world through the study of cultural and literary readings. High level of proficiency in Spanish will be emphasized.</td>
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<tr>
<td>Course Descriptions</td>
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<tr>
<td><strong>SPAN 11 — Spanish for the Spanish Speaking</strong></td>
<td>4 Units</td>
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<td>72.00 hours lecture.</td>
<td>Degree Appropriate, CSU, UC</td>
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<td>Provides Spanish-speaking students without previous formal study of Spanish with the basis to improve skills in standard Spanish and to broaden their understanding of Hispanic cultures. Focuses on developing vocabulary, improving orthography and the use of grammatical structures, both oral and written. Class instruction conducted in Spanish.</td>
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<td><strong>SPAN 12 — Continuing Spanish for the Spanish Speaking</strong></td>
<td>4 Units</td>
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<td>72.00 hours lecture.</td>
<td>Degree Appropriate, CSU, UC</td>
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<td>Prerequisite: SPAN 11 or equivalent</td>
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<td>Provides Spanish-speaking students with previous formal study of Spanish with further development and improvement of skills in standard Spanish and a broader understanding of Hispanic cultures. Culturally-based topics are the focus of readings and class discussions. Class instruction conducted in Spanish.</td>
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<td><strong>SPAN 25 — Spanish Literature</strong></td>
<td>3 Units</td>
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<td>Degree Appropriate, CSU, UC</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td>54.00 hours lecture</td>
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<td>Introduction to the literatures of Mexico, other Spanish-American countries and Spain. All reading and lectures are in Spanish.</td>
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<td><strong>SPAN 26 — Introduction to Hispanic Literature</strong></td>
<td>3 Units</td>
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<td>Degree Appropriate, CSU, UC</td>
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<td>54.00 hours lecture</td>
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<td>Development of intermediate Spanish conversational skills. Emphasis on collaborative activities and practical use of the language. Extensive exposure to Hispanic culture. Grammar is presented in context.</td>
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<td><strong>SPAN 29 — Intermediate Spanish for Health Professionals</strong></td>
<td>4 Units</td>
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<td>Degree Appropriate, CSU, UC</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<td>54.00 hours lecture</td>
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<td>Practice in extemporaneous speaking with stress on organization and delivery. Analyze, synthesize, criticize and advocate ideas, using inductive and deductive reasoning, distinguishing fact from opinion and avoiding fallacies of language and logic as critical thinkers both as alert members of an audience and as perceptive public speakers.</td>
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<td><strong>SPCH 3 — Voice and Diction</strong></td>
<td>3 Units</td>
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<td>Degree Appropriate, CSU, UC</td>
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<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
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<tr>
<td>54.00 hours lecture</td>
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<tr>
<td>Improvement of the speaking voice and oral communication style, including proper use for control and projection of the voice, vocal expressiveness, articulation and pronunciation. Develops accuracy of sound production for standard American speech through use of the International Phonetic Alphabet. Emphasizes individual diagnosis and extensive oral practice.</td>
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</table>
both theory and practice.

54.00 hours lecture. Degree Appropriate, CSU, UC

Advisory: SPCH 1A or SPCH 1AH

Participation in intercollegiate speech tournaments through Mt. SAC Forensics Team. Instructions in preparatory procedures for these tournaments, including techniques in persuasive oratory, extemporaneous interpretation, expository, impromptu, discussion, speech analysis, debate. Student has option to choose area of interest and also an opportunity to participate in public community programs. Attendance required at one competition. Students who repeat this course will improve skills through further instruction and practice.

SPCH 20 — Argumentation and Debate 3 Units

(May be taken four times for credit.) Degree Appropriate, CSU, UC

Prerequisite: SPCH 1A or SPCH 1AH or equivalent

Equips the student to engage in rational discussion and reasoned advocacy. Emphasis is given to rhetorical principles of argumentation, both theory and practice.

SPCH 20H — Argumentation and Debate - Honors 3 Units

54.00 hours lecture. Degree Appropriate, CSU, UC

Prerequisite: SPCH 1A or SPCH 1AH and acceptance into the Honors Program

Equips the student to engage in rational discussion and reasoned advocacy. Emphasis is given to rhetorical principles of argumentation, both theory and practice. An honors course designed to provide an enriched experience. Students may not receive credit for both SPCH 20 and SPCH 20H.

SPCH 26 — Interpersonal Communication 3 Units

54.00 hours lecture. Degree Appropriate, CSU, UC

Prerequisite: Eligibility for ENGL 68

Principles of verbal and nonverbal transactions that occur in everyday face-to-face communication. Study of theory and research findings and their application to communication in professional and personal relationships.

SPCH 26H — Interpersonal Communication - Honors 3 Units

54.00 hours lecture. Degree Appropriate, CSU, UC

Prerequisite: Acceptance into the Honors Program

Principles of verbal and non-verbal transactions that occur in everyday face-to-face communication. Study of theory and research findings and their application to communication in professional and personal relationships. An honors course designed to provide an enriched experience. Students may not receive credit for both SPCH 26 and SPCH 26H.

SPCH 68 — Preparation for Public Speaking 3 Units

54.00 hours lecture. Degree Appropriate

Advisory: ENGL 67 or AMLA 43W or eligibility for ENGL 68

Preparation for college level public speaking. Emphasis on outlining, research skills, organization of ideas, and management of speech anxiety. Includes multiple speaking and anxiety reduction activities.

SPCH 99 — Special Projects in Speech 2 Units

(May be taken four times for credit.) Degree Appropriate, CSU

108.00 hours lecture.

To offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, the various departments from time to time offer Special Projects courses. The content of each course and the methods of study vary from semester to semester and depend on the particular project under consideration. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced.
### SURVEYING

**SURV 1A — Surveying** 3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
54.00 hours lab.  
Prerequisite: MATH 150 or equivalent high school courses  
Surveying fundamentals; use and care of surveying instruments including steel tape, engineer’s level, theodolite and total station; horizontal and vertical measurements; layout, traverse, area computations; analysis and adjustments; random errors; stadia surveying; mapping.

**SURV 1B — Surveying** 3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
54.00 hours lab.  
Prerequisite: SURV 1A  
Construction surveying; volumes; property surveying; control surveys; California coordinate system; horizontal and vertical curves; introduction to electronic, photogrammetric, and G.I.S. methods; mapping project; introduction to the method of least squares; land survey descriptions; astronomical observations.

### TECHNOLOGY-RELATED COURSES

**TECH 60 — Customer Relations for the Technician** 1 Unit  
Degree Appropriate  
(May be taken for Credit/No Credit only.)  
18.00 hours lecture.  
Customer relations (soft skills) for the technician including benefits of knowing and using effective customer contact tools, proper customer interactions, ethics, and maintaining customer satisfaction.

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### THEATER ARTS

**THTR 9 — Introduction to Theatre Arts** 3 Units  
(CAN DRAMA18)  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
A comprehensive introduction to the theater, including the aesthetic, artistic, technical, and business aspects.

**THTR 10 — History of Theatre Arts** 3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 1A  
Designed to present an appreciative background to dramatic literature and to the development of dramatic art. Representative plays and the history and development of the living stage will be stressed.

**THTR 11 — Principles of Acting I** 3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU, UC  
Introduction to the basic principles and techniques of acting as an artistic discipline. Analysis of the plot, characterization and language of the drama. Performances of laboratory scenes, readings and exercises.

**THTR 12 — Principles of Acting II** 3 Units  
(CAN DRAMA22)  
Degree Appropriate, CSU, UC  
54.00 hours lecture.  
Prerequisite: THTR 11  
Advanced study of principles presented in DRMA 11. An investigation of acting techniques through the study and presentation of varied dramatic scenes.

**THTR 14 — Stagecraft** 3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU, UC  
54.00 hours lab.  
Theory and practice of stage design and lighting. Practical work in scenic design and construction and lighting layouts, with the opportunity to perform these tasks in actual theatre situations. By virtue of the wide range of productions staged by the department, students who repeat this course will increase their skills and proficiency.

**THTR 15 — Play Rehearsal and Performance** 2 Units  
(CAN DRAMA16)  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
108.00 hours lab.  
Participation under faculty supervision in the planning, preparation and presentation of college-sponsored dramatic presentations. Emphasis on acting with some technical theatre assignments. Students who repeat this course will improve skills through further instruction and practice.

**THTR 16 — Theatrical Make-Up** 2.5 Units  
36.00 hours lecture.  
Degree Appropriate, CSU, UC  
36.00 hours lab.  
An introduction to the theory and practice of makeup for the stage. The student will gain practice in the design and application of straight, stylized character, and other make-up techniques.

**THTR 17 — Acting for Television** 3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU, UC  
Prerequisite: THTR 11  
Assists students to prepare for an occupation in the performing areas of television and film. Background, methodology and techniques of acting for the camera. Includes TV equipment and how to make it work for the TV actor; study of image, type and character with practical exercises and scenes in various styles such as TV drama, sitcoms, news, commercials.

**THTR 18 — Technical Theater Practicum** 1 Unit  
(May be taken for option of letter grade or Credit/No Credit.)  
54.00 hours lab.  
Participation in the technical preparation and operation of productions presented to the community. The student will be involved in one or more of the following areas: stage scenery construction, stage lighting setup, property construction, stage sound setup, costume construction and make-up. Crew assignments will be given to the student upon enrollment. The availability of assignments is contingent upon the requirements of the production. Students who repeat this course will improve skills through further instruction and practice.

**THTR 19 — Theatrical Costuming** 3 Units  
(May be taken for option of letter grade or Credit/No Credit.)  
36.00 hours lecture.  
54.00 hours lab.  
Theatrical costuming design and construction. Includes the study of costume history, principles of costume design, fibers and textiles, basic costume construction, and design rendering techniques. Costume crew assignments for major productions will provide practical instruction in actual performance demands on costumes and their proper maintenance. Class is suitable for people interested in costuming for theater, dance, film, television, and reenactments. Students who repeat this course will improve skills through further instruction and practice.

**THTR 24 — Introduction to Theatrical Design** 3 Units  
36.00 hours lecture.  
Degree Appropriate, CSU  
54.00 hours lab.  
Prerequisite: THTR 14  
Sketching and a variety of media techniques for scenic design for theatre arts. Development of a scenic floor plan, elevations and rendering. Application of basic techniques of drawing and drafting. Students will provide practical instruction in actual performance demands on scenic design and construction and lighting layouts, with the opportunity to perform these tasks in actual theatre situations. By virtue of the wide range of productions staged by the department, students who repeat this course will increase their skills and proficiency.

**THTR 25 — Theatrical Playwriting** 3 Units  
54.00 hours lecture.  
Degree Appropriate, CSU  
Advisory: Eligibility for ENGL 1A  
Playwriting for the stage. Students will create and critique their own plays, as well as study and critique plays by well-known authors and productions. Includes basics of linear broken down, episodic, “A”-“B” and ritual structures.
problem solving, and working with a diverse student population.

Introduction to tutoring, with an emphasis on tutoring strategies, Tutoring in the English language with an emphasis on approaches to working with students on written drafts and addressing the needs of non-native speakers.

TUTR 10B — Tutoring in the English Language 1 Unit Non-Degree Credit
(May be taken for option of letter grade or Credit/No Credit.)
18.00 hours lecture.
Prerequisite: Eligibility for ENGL 1A
Tutoring in the English language with an emphasis on approaches to working with students on written drafts and addressing the needs of non-native speakers.

TUTR 10C — Tutoring as a Supplemental Instructor 1 Unit Non-Degree Credit
(May be taken for option of letter grade or Credit/No Credit.)
18.00 hours lecture.
Prerequisite: Eligibility for ENGL 1A
Tutoring as a Supplemental Instructor with an emphasis on tutoring in the classroom and in small groups under the supervision of a designated instructor.

TUTR 10D — Tutoring in Mathematics 1 Unit Non-Degree Credit
(May be taken for option of letter grade or Credit/No Credit.)
18.00 hours lecture.
Prerequisite: Eligibility for ENGL 1A
Tutoring in mathematics with an emphasis on strategies to promote active learning using manipulatives and dealing with specific obstacles in developmental algebra.

TRAN 17 — Air Transportation 3 Units 54.00 hours lecture. Degree Appropriate, CSU
Advisory: AERO 23
A survey course of the air transportation industry. Topics include a historical perspective, regulators and associations, general aviation industry, airline industry, economic characteristics of the airlines, airline management, air cargo, airline labor relations, international aviation, and aviation career planning.

TRAN 19 — Air Law and Regulation 2 Units 36.00 hours lecture. Degree Appropriate
Develops a basic understanding of the legal environment surrounding aviation, the fundamentals of the U.S. legal system, and the impact of the U.S. constitution on aviation activities. Topics include criminal law for aviators and air carriers, tort liability and air commerce, government regulations, contract and commercial law in aviation related businesses, property law for aircraft owners and airport operators, labor and employment law in aviation industries, international law and treaties that affect aviation.

WATR 60 — Introduction to Water Systems 3 Units Degree Appropriate
Water sources, hydrological cycle, pre-treatment, water mathematics, basic water chemistry, treatment plant processes, safety, disinfection, corrosion, bacteriology and the public health aspects of potable water.

WATR 61 — Water Treatment 3 Units Degree Appropriate
Advisory: WATR 60 taken prior
Emphasizes public health aspects of potable water supply, wells, process control procedures, chlorination systems, water softening, safety, review laboratory procedures, laboratory techniques and equipment, advanced water mathematics and State-Health Department Title 22, Water Quality Standards. Prepares students for the Grade I and II State Water Treatment Operator Certification.

WATR 62 — Water Distribution 3 Units 54.00 hours lecture. Degree Appropriate
Advisory: WATR 60 taken prior
Water distribution systems operation, administration, safety, maintenance, introduction to Cross-connection Control Title 17. Prepares students for Grade II and III AWWA Distribution Operator Certification.

WATR 63 — Cross Connection Control - Certified Tester 3 Units 54.00 hours lecture. Degree Appropriate
Advisory: WATR 60 taken prior or concurrently
Offers knowledge necessary to understand the operation of and testing procedures for backflow prevention assemblies. Analyzes Title 17 of the California Administrative Code and Chapter 6 of the Uniform Plumbing Code as they relate to cross-connection control. Prepares students for County Health Department and AWWA certification as Backflow Prevention Device Testers.

WATR 64 — Cross Connection Control - Certified Specialist 3 Units 54.00 hours lecture. Degree Appropriate
Advisory: WATR 60 taken prior
Offers knowledge necessary to apply the principles of backflow prevention, as outlined in Title 17 of the California Administrative Code, to the administration of a cross-connection control program. Also teaches a student about the use of recycled water as outlined in Title 22 of the California Administrative Code. Prepares students who are otherwise qualified to take the AWWA Cross-Connection Specialist Certification Exam.

WATR 65 — Water Hydraulics and Instrumentation 3 Units 54.00 hours lecture. Degree Appropriate
Advisory: WATR 60 taken prior
Offers knowledge necessary to understand the operation of and testing procedures for backflow prevention, as outlined in Title 17 of the California Administrative Code, to the administration of a cross-connection control program. Also teaches a student about the use of recycled water as outlined in Title 22 of the California Administrative Code. Prepares students who are otherwise qualified to take the AWWA Cross-Connection Specialist Certification Exam.

WELDING

Cluster repeatability: Credit students are limited to enroll up to 4 times only for any combination of courses within a designated cluster, regardless of the individual course unit values.

Cluster: WELD 96, WELD 97, WELD 98, WELD 99

WELD 96 — Welding 3 Units 54.00 hours lecture. Degree Appropriate
Practical welding skills, welding techniques, equipment, and materials used in welding. Emphasizes the safe and practical application of sound principles of welding.

WELD 97 — Welding 3 Units 54.00 hours lecture. Degree Appropriate
Practical welding skills, welding techniques, equipment, and materials used in welding. Emphasizes the safe and practical application of sound principles of welding.

WELD 98 — Welding 3 Units 54.00 hours lecture. Degree Appropriate
Practical welding skills, welding techniques, equipment, and materials used in welding. Emphasizes the safe and practical application of sound principles of welding.

WELD 99 — Welding 3 Units 54.00 hours lecture. Degree Appropriate
Practical welding skills, welding techniques, equipment, and materials used in welding. Emphasizes the safe and practical application of sound principles of welding.
### Course Descriptions

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<th>Units</th>
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<td>WELD 30</td>
<td>Metal Sculpture</td>
<td>2</td>
<td>Designed for students seeking a career in welding and welding inspection. Covers structure of matter, chemical, physical, and mechanical properties of metals, principles of alloying, solid state diffusion, plastic deformation, and heat treatment.</td>
</tr>
<tr>
<td>WELD 40</td>
<td>Introduction to Welding</td>
<td>2</td>
<td>Basic electric arc welding, weld symbols, standard electrode and alloy electrode selection, American Welding Society (AWS) procedure for certification.</td>
</tr>
<tr>
<td>WELD 50</td>
<td>Oxyacetylene Welding</td>
<td>2</td>
<td>Oxyacetylene fusion welding, non-fusion welding and cutting. Develops understanding of and fundamental skills in modern welding practices.</td>
</tr>
<tr>
<td>WELD 51</td>
<td>Basic Electric Arc Welding</td>
<td>2</td>
<td>Basic electric arc welding, weld symbols, standard electrode and alloy electrode selection, American Welding Society (AWS) procedure for certification.</td>
</tr>
<tr>
<td>WELD 53A</td>
<td>Welding Metallurgy</td>
<td>3</td>
<td>Designed for students seeking a career in welding and welding inspection. Covers structure of matter, chemical, physical, and mechanical properties of metals, principles of alloying, solid state diffusion, plastic deformation, and heat treatment.</td>
</tr>
<tr>
<td>WELD 54</td>
<td>Reading and Computations for Welders</td>
<td>3</td>
<td>Provides actual on-the-job experience in welding at an approved work site which is related to classroom instruction. A minimum of 75 paid or non-paid clock hours per semester of supervised work is required for each unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>WELD 70A</td>
<td>Beginning Arc Welding</td>
<td>3</td>
<td>Developed manipulative skills and techniques for the beginning student welder on the shield metal arc (SMAW) and the flux cored arc (FCAW) welding processes in the vertical and overhead positions. Designed to refine previously acquired welding skills.</td>
</tr>
<tr>
<td>WELD 70B</td>
<td>Intermediate Arc Welding</td>
<td>3</td>
<td>Intermediate level class in Gas Tungsten Arc Welding (GTAW), Plasma Arc cutting and oxyfuel cutting and welding will be covered. All position welds with many varying thickness will be covered.</td>
</tr>
<tr>
<td>WELD 70C</td>
<td>Certification for Welders</td>
<td>3</td>
<td>Advanced level class in Gas Tungsten Arc Welding (GTAW), Plasma Arc cutting and oxyfuel cutting and welding will be covered. All position welds with many varying thickness will be covered.</td>
</tr>
<tr>
<td>WELD 70D</td>
<td>Fabrication and Construction Welding</td>
<td>3</td>
<td>Special emphasis will be placed on welding symbols and the American Welding Society's (AWS) D1.1 and D1.3.</td>
</tr>
<tr>
<td>WELD 70E</td>
<td>Pipe and Tube Welding</td>
<td>3</td>
<td>Special emphasis will be placed on welding symbols and the American Welding Society's (AWS) D1.1 and D1.3.</td>
</tr>
<tr>
<td>WELD 70F</td>
<td>Work Experience in Welding</td>
<td>1</td>
<td>Provides actual on-the-job experience in welding at an approved work site which is related to classroom instruction. A minimum of 75 paid or non-paid clock hours per semester of supervised work is required for each unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
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*Advisory: WELD 70B taken prior*
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</thead>
<tbody>
<tr>
<td>WELD 97</td>
<td>Work Experience in Welding</td>
<td>2</td>
<td>Provides actual on-the-job experience in welding at an approved work site which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>WELD 98</td>
<td>Work Experience in Welding</td>
<td>3</td>
<td>Provides actual on-the-job experience in welding at an approved work site which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>WELD 99</td>
<td>Work Experience in Welding</td>
<td>4</td>
<td>Provides actual on-the-job experience in welding at an approved work site which is related to classroom instruction. A minimum of 75 paid or 60 non-paid clock hours per semester of supervised work is required for each unit of credit. Students who repeat this course will improve skills through further instruction and practice.</td>
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Section 11
Community Education
Community Education

COMMUNITY EDUCATION (ADULT EDUCATION) COURSES
Noncredit courses are designed to meet the special needs and capabilities of those students who do not desire or need to obtain college unit credit. These courses provide developmental, occupational and other general education opportunities. Courses and programs are further defined categorically under the California Education Code, Section 84711, whereby state funding is authorized for nine specific categories as follows: Parenting, Basic Skills (including tutoring), English as a Second Language, Citizenship, Programs for the Handicapped, Vocational Courses, Programs for the Older Adult, Home Economics, Health and Safety and additional courses qualified for adult education curricula.

Student Services
Admissions and Registration
For Community Education (noncredit) and Community Services (fee-based) offerings, admission and registration is completed using a registration card. However, enrollment in ESL and/or Basic Skills courses requires assessment and orientation prior to registration (see explanations, following). Students may register for most courses at any time during the semester, on a space available basis. Noncredit and fee-based offerings are available to community members regardless of residency status.

Assessment
Basic Skills students are assessed prior to enrolling in courses. Additional assessments are available for specific needs. Basic Skills assessment services include testing for academic skill levels, learning strengths, career paths and learning disabilities. For more information, contact (909) 594-5611, ext. 4845.

ESL students must be assessed prior to enrollment. Placement testing is offered every Thursday, year-round. Multilingual assistance is available. For more information, contact (909) 594-5611, ext. 5235.

Orientation
Basic Skills and ESL students must attend an orientation session prior to registration. Orientation sessions are generally offered immediately after assessment.

Counseling and Advisement
Educational advisement services are available in the Community Education Division office the Administration Building, building 4, room 221D, during the first week of registration and at the beginning of each semester for career and educational planning. These educational advisement services are also on-going throughout the semester through the Community Education Center. To schedule an individual appointment, students should call the Community Education Center, (909) 594-5611, ext. 4845.

The Basic Skills and ESL departments provide counselors and educational advisors to serve their students. Assistance to all noncredit students includes development of Educational and Career Plans, identification of personal, academic and career goals, career skill practice and resources, transitioning to credit programs, and assessment of special needs.

Fees and Expenses
There is no tuition for noncredit courses. However, some courses include a fee for materials provided to students. In addition, students who park on the Mt. San Antonio College campus must have a valid, current parking permit. Permits may be purchased in the Administration Building, building 4, lower level. Books and supplies needed for a class are the responsibility of the student unless specifically noted as provided by a material fee.

Credit/Noncredit Combined Courses
The Division offers many credit classes to Community Education students for noncredit. Students may enroll in these classes in accordance with procedures outlined in the Community Education class schedule. Students will not receive college credit. However, students enrolled in these classes who wish to receive a certificate of completion are expected to complete all assignments including tests, quizzes, projects and examinations. (A list of Noncredit Certificate Programs is provided beginning on page 213 of this catalog.) Students wishing to complete a noncredit certificate program in one of the occupational areas of study must apply to the Community Education Division office, the Administration Building, building 4, room 221D, to initiate the issuance of a certificate. Certificate completion forms should be obtained from the Division office prior to the end of the first semester of classes.

Basic Skills and Special Programs
The Basic Skills and Special Programs department works with local K-12 districts, county and state agencies to provide programs to students with special and/or basic skills needs. Courses and services include:

- Basic Skills Remediation
- GED Preparation and Testing
- Adult High School Diploma Program
- High School Referral Program (high school make-up credit)
- Summer High School Program
- Athlete Tutoring and Student Support (WIN Program)
- Parent Education Courses
- Armed Services Vocational Aptitude Battery (ASVAB) Preparation
- Support Services to Careers in Childcare Program Students

Community Education

COMMUNITY EDUCATION

High School and Career Counseling: Educational Advising
- Computer Literacy and Keyboarding Classes
- Typing Test Certification
For more information on Basic Skills and Special Programs, contact (909) 594-5611, ext. 4845.

English as a Second Language
ESL classes are provided for English language learners at all levels of proficiency, from low literacy to advanced, transitioning to credit. Classes and services include:

- Assessment for level placement (Pre-Level 1 - Level 6)
- Core level classes focusing on integrated skills (grammar, listening, speaking, reading and writing)
- Skill-focused classes (Speaking A-C, Writing A-C)
- Specialized courses (TOEFL preparation, Citizenship preparation)
- Vocational ESL (Career Paths)
- Contract ESL customized for the workplace
- Career guidance and counseling
For more information on ESL programs located in the Language Center, Building 66, contact (909) 594-5611, ext. 5235.

Language Learning Center
Mt. San Antonio College’s Language Learning Center (LLC) provides a laboratory in which students may practice ESL and a variety of foreign languages, including Chinese, English, French, German, Italian, Japanese, Spanish and Sign Language. Located in the Learning Technology Center, building 6, room 264, the LLC is available on a noncredit and credit basis. Users of the LLC may register year-round. Offerings include:

- Interactive language software in all supported languages
- DVD’s, videos, audio recordings
- Pronunciation software
- Computer Aided Testing for Federal Aviation Administration and Chiropractic tests
For more information on the LLC, contact (909) 594-5611, ext. 4580.

Exercise Science and Wellness Center
The Exercise Science and Wellness Center provides an exercise facility which includes cardio and strengthening equipment, a variety of exercise classes led by certified instructors and specialized fitness testing. It welcomes community members as well as Mt. San Antonio College students and employees. Individuals can register in the Community Education Registration office in the Administration Building, building 4, room 221D, or in the Wellness Center. For more information, contact (909) 594-5611, ext. 4625.
Community Education

Community Health Programs and CPR
The College offers courses such as First Aid, Heartsaver, AED and more.
- Records rosters and information updates per American Heart Association (AHA) requirements
- Provides videos, texts and manikins per AHA requirements
For more information, contact (909) 594-5611, ext. 4838.

Health Careers Resource Center (HCRC)
The Center provides the resources to increase student knowledge base, to
learn new skills and to reinforce previously learned skills. Resources
are provided to anyone involved or interested in health occupations.
The HCRC provides a state-of-the-art learning lab environment to:
- develop new health related skills/knowledge
- update prior or current knowledge
- participate in simulated clinical activities which will promote success
  in the health care industry.

The center is open to credit and noncredit health career students,
community health care workers/professionals, individuals preparing for
health related licensure or certification exams and any individual
involved or interested in health related careers. Some of the campus
programs/departments actively utilizing the center include:
- Technology and Health Division
- Medical Services – EMT, Paramedic, PA Prep
- Mental Health Technology
- Nursing
- Radiologic Technology
- Respiratory Therapy
- Community and Non-Credit Education Division
- Long-Term and Acute Certified Nursing Assistant (C.N. A.)
- RN Re-entry Into Practice
- IV Therapy, CPR
- Health Care Interpreting
- International Health Worker
- Physical Therapy Aide

Health Careers Resource Center Available Services
- RN assistance in clinical skills practice and performance evaluation
- Medical and hospital equipment/supplies/ manikins/ training aids for
  hands on demonstrations and application of basic, intermediate
  and advanced skills
- Health Skills Performance Update/ Evaluation
- Clinical simulations for Med-Surg, Psych, OB, Peds, Perioperative etc.

Self-Paced, Multisensory Learning Aides
- Expansive Technology Library on all health subjects
- Medical/Nursing resource books, journals
- ADAM programs for anatomy and physiology review
- Mock computer adaptive testing programs for NCLEX-RN and PN
  State Board Exam preparation
- Computer adaptive instruction for gaining or remediation math,
  pharmacology, dosage calculation skills or medication
  administration skills
- Internet access for searching full-text article databases and access
  lists of pre-evaluated web sites on all lab computers
- Computerized virtual clinical simulation programs
- Medical terminology and bilingual media for International learners

Older Adult Program*
Courses designed for older adults (age 55+ years) provide the full
continuum of education from vocational classes to the pursuit of long-
standing educational goals. Classes are offered in the arts, personal
growth, physical and mental fitness and vocational areas, and are
conducted both on campus and at various senior and community centers
and residential facilities throughout the Mt. San Antonio College District.

Mountie Volunteer Program (MVP)
The MVP Program coordinates and provides volunteer opportunities on
campus while providing training and support services for MVP
participants. Partnering with the Retired Senior Volunteer Program
(RSVP) of the greater Pomona Valley, the program provides for the
recruiting and screening of potential volunteers.

Generations Program
The Generations Program provides educational activities which foster
intergenerational relationships that link generations for the good of
society, such as student athletes providing volunteer hours for the
Older Adult Program.
For more information on Older Adult Programs, please call
(909) 594-5611, ext. 4192.

The Training Source
The Training Source provides on-site, customized, short-term training
courses for businesses, K-12 school districts, cities and agencies in the
greater Los Angeles and Inland Empire areas. Programs are designed to
meet specific client needs and are taught by college faculty members
as well as industry professionals. For more information, contact
(909) 468-3933.

Other Community Education Services and Programs
- Fee-based programs related to career development and personal
  enrichment for community members
- College 4 Kids and Youth Programs
- CPR and First Aid
- Vehicle Safety Programs (Motorcycle, Traffic School, Driver’s Training)
- Community Education Fitness Programs
- Farm Tours
- Wildlife Sanctuary Tours
- Planetarium Shows
- Study Skills Laboratory for Disabled Students Programs and Services
- San Gabriel Valley Training Center (serving developmentally
disabled adults)
For more information regarding Community Education Services and
Programs, contact (909) 594-5611, ext. 4220.

*Note: Although courses are designed for the older adult, anyone
18 years of age and older may enroll.
## Community Education

### Certificates of Competency
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Community Education

**CERTIFICATES OF COMPETENCY**

Noncredit Certificates of Competency represent sequences of courses in Basic Skills, Career Development, English as a Second Language or Secondary Education, which allow the student to develop individual competencies based on their personal educational goals and objectives. Each certificate is unique, but all provide the student an opportunity to gain skills necessary to advance in their careers or transition into a new career or prepare for future advanced academic studies and training. Students are encouraged to gain more information by calling the College telephone number listed in each of the four specific Certificates of Competency that follow.

**Basic Skills**
SYS #102892

The Basic Skills Certificate of Competency provides courses and training in skills that will improve opportunities for students to obtain employment, advance in their careers or prepare for future advanced academic studies. Students will increase basic skills, i.e., reading, writing, math and computer skills, and progress in this sequence based on individual needs. Courses are offered days and evenings to accommodate work and personal schedules. For more information, please call (909) 594-5611, ext. 4845.

**Certificate Requirements:**
Course ID  Course Title
BCSK ABE01  Adult Basic Education
BCSK ABE06  Basic Skills Foundation
BCSK LERN06  Personal Computer Applications
BCSK LERN01  Short-Term Review
BCSK LERN03  Math Skills Review
BCSK LERN72  Reading Acceleration
BCSK LERN76  Improving Reading Comprehension
BCSK LERN81  Improving Writing
BCSK MATH01  Developmental Mathematics Concepts and Applications
BCSK WRTR02  Basic Writing Skills Development

**English as a Second Language**
SYS #784025

ESL students are placed within the following sequence of courses according to their English abilities. Students progress through this sequence based on individual need before transferring into credit courses or employment. Supplemental courses in speaking, writing and vocational language will assist their progress through the sequence and may be taken along with level classes as needed. Courses are offered all year long, including winter and summer intersessions. Classes are offered days, evenings and weekends. For more information, please call (909) 594-5611, ext. 5235.

**Certificate Requirements:**
Course ID  Course Title
ESL V-PVL-1  ESL – Pre-Level 1
ESL V-LVL-1  ESL – Level 1
ESL V-LVL-2  ESL – Level 2
ESL V-LVL-3  ESL – Level 3
ESL V-LVL-4  ESL – Level 4
ESL V-LVL-5  ESL – Level 5
ESL V-LVL-6  ESL – Level 6
ESL VII A  ESL – Speaking A
ESL VII B  ESL – Speaking B
ESL VII C  ESL – Speaking C
TOEFL  TOEFL Preparation
ESL WRT-A  ESL Writing A
ESL WRT-B  ESL Writing B
ESL WRT-C  ESL Writing C
BCSK LANG01  Language Skills Laboratory
ESL V-MLTH  English as a Second Language for Health Professionals

**Career Development**
SYS #244852

Career development provides students with information and guidance on college opportunities, careers and life planning. Students can apply skills gained to their current employment and personal lives and will improve their opportunities to advance in their careers or transition into a new career. This sequence of courses is offered days and evenings to accommodate adults with alternating schedules. For more information, please call (909) 594-5611, ext. 4845.

**Certificate Requirements:**
Course ID  Course Title
BCSK ABE01  Career Information and Guidance
BCSK ABE02  Adult Basic Education
BCSK ABE03  Adult Basic Education – Leadership Development
BCSK ABE04  Guidance and Orientation to Special Programs
BCSK ABE05  Career Development
BCSK ABE06  Basic Skills Foundation
BCSK ABE07  Re-Entry Work Skills Needed for Today’s Workforce
BCSK CNSL05  Career/Life Planning

**Secondary Education**
SYS #259121

The High School Program provides all courses needed to satisfy requirements for a high school diploma. Students earning a high school diploma increase future employment and educational opportunities, including college and training programs. Completion of these courses will provide the student with a high school diploma. For more information, please call (909) 594-5611, ext. 4845.

**Certificate Requirements:**
Course ID  Course Title
BCSK HSAD  High School Academic Decathlon
BCSK HSADRW  High School Expository Writing and Critical Reading
BCSK HSALG1  High School Algebra 1
BCSK HSALG2  High School Algebra 2
BCSK HSART1  High School Art and Creative Expression
BCSK HSART2  High School Art 2
BCSK HSBIO  High School Biology
BCSK HSCHM  High School Chemistry
BCSK HSCHM1  High School Chinese 1
BCSK HSCIV  High School Civics/American Government
BCSK HSCPTC  High School Computer Technology
BCSK HSDIPR  High School Diploma and Referral
BCSK HSEASC  High School Earth Science
BCSK HSEDON  High School Economics
BCSK HSELEA  High School CAHSEE Prep – English Language Arts
BCSK HSEEMA  High School CAHSEE Prep – Mathematics
BCSK HSEENG1  High School English 1
BCSK HSENG2  High School English 2
BCSK HSENG3  High School English 3
BCSK HSENG4  High School English 4
BCSK HSEGEO  High School Geography
BCSK HSEGEO  High School Geometry
BCSK HSGRAP  High School Advanced Graphics/Printing
BCSK HSILTH  High School Health
BCSK HSJOUR  High School Journalism
BCSK HSKEY  High School Typing/Keyboarding
BCSK HSSC  High School Life Science
BCSK HSTMTH  High School General Math
BCSK HSMUSIC  High School Music Appreciation
BCSK HSNS1  High School Natural Science 1
BCSK HSNS2  High School Natural Science 2
BCSK HSPHIL  High School Philosophy
BCSK HSPSC  High School Physical Science
BCSK HSPSLNG  High School Planning and Guidance
BCSK HSSTU  High School Pre-Algebra
BCSK HSPTY  High School Psychology
BCSK HSSK  High School Study Skills
BCSK HSSS  High School Single Survival
BCSK HSSTC  High School Sociology
BCSK HSSPN1  High School Spanish 1
BCSK HSSPN2  High School Spanish 2
BCSK HSSTG  High School Stagescrafts
BCSK HSTAL2  High School Topics in Algebra 2
BCSK HSTGEO  High School Topics in Geometry
BCSK HSTUSH  High School United States History
BCSK HSVD  High School Video and Media Production
BCSK HSCHW  High School World History
BCSK HSWEK  High School Expository Writing

**CERTIFICATES IN OCCUPATIONAL TRAINING**

California Community College Adult Education Programs are authorized to offer short-term vocational programs with high employment potential. The demonstration of need to offer these programs within the College service area is determined by manpower needs projections from the California Occupational Information System (COTS), or surveys of employer needs in the community, or state licensing mandates and/or certification.

**What Are Occupational Training Certificates?**

Certificates in a variety of vocational programs are available through the Community Education Division. Many of these certificate programs mirror those offered through the credit programs of the College, are favorably recognized by business and industry, and are frequently used as a requirement for professional advancement. Classes taken are noncredit, and do not generate college credit. Specific certificate content and more information can be found in the Community Services Schedule of Classes for the semester or contact (909) 594-5611, ext. 4220.

**How to Finish an Occupational Certificate**

In order for students to receive a Certificate of Completion, the student must do the following:
- Obtain the appropriate Certificate Application Form from the Community Education Division Office, Administration Building (Building 4), Room 221.
- Register and pay material fees if required for desired classes
- Attend a minimum of 75% of required class hours
 Accounting – Computerized
SYS #962408
The Computerized Accounting Certificate provides the student with basic accounting skills and knowledge together with additional training in computer applications common to the accounting industry. This certificate prepares the student for an entry-level position as a computerized accounting clerk. Common duties performed in this field are utilization of accounting software programs for posting transactions to journals/ledgers, accounts receivable, accounts payable, inventory tracking/reporting, bank reconciliation, expense reporting, and account analysis. If the student has not had any previous coursework, the sequence can be completed in one year, and students have several choices of courses to select for desired emphasis.

Certificate Requirements:
Completion of Accounting – Bookkeeping Certificate (234 hours)

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSA75</td>
<td>Using Microcomputers in Financial Accounting</td>
<td>18</td>
</tr>
<tr>
<td>VOC BSA76</td>
<td>Using Microcomputers in Managerial Accounting</td>
<td>18</td>
</tr>
<tr>
<td>VOC CJS15</td>
<td>Microcomputer Applications</td>
<td>72</td>
</tr>
<tr>
<td>VOC CP11</td>
<td>Internet Research for Business</td>
<td>36</td>
</tr>
<tr>
<td>VOC CP20</td>
<td>Microsoft Word</td>
<td>72</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>216</strong></td>
<td></td>
</tr>
</tbody>
</table>

 Accounting – Payroll
SYS #597867
The Payroll Certificate combines basic accounting skills with specialized training in payroll preparing the student for entry-level positions within the payroll segment of accounting. Common duties performed in this field include payroll tax reporting, maintenance of payroll accounting systems and posting payroll transactions to journals/ledgers. The sequence could be completed in one semester.

Certificate Requirements:
Completion of Accounting – Bookkeeping Certificate (234 hours)

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGAN02</td>
<td>Animal Nutrition</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGAN94</td>
<td>Animal Breeding</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGL16</td>
<td>Horse Production</td>
<td>72</td>
</tr>
<tr>
<td>VOC AGL18</td>
<td>Horse Ranch Management</td>
<td>72</td>
</tr>
<tr>
<td>VOC AGL19</td>
<td>Horse Hoof Care</td>
<td>36</td>
</tr>
<tr>
<td>VOC AGL16</td>
<td>Animal Sanitation</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGL19</td>
<td>Disease Control</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>324</strong></td>
<td></td>
</tr>
</tbody>
</table>

 Floral Design
SYS #132282
This sequence is offered in the evening only on campus and at off-campus locations and can be completed in two years. Students completing all three courses will have skills and knowledge to seek jobs in floral design beyond entry-level positions, i.e., first-line supervision and/or management and Floral Designers.

Certificate Requirements:
Course ID | Course Title | Hours |
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>VOC AGOR25</td>
<td>Floral Design – 1</td>
<td>90</td>
</tr>
<tr>
<td>VOC AGOR26</td>
<td>Floral Design – 2</td>
<td>90</td>
</tr>
<tr>
<td>VOC AGOR27</td>
<td>Floral Design – 3</td>
<td>90</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>270</strong></td>
<td></td>
</tr>
</tbody>
</table>

 Horse Ranch Management
SYS #391289
This sequence of courses is designed to enable students to prepare for a career in horse ranch management. Courses provide students hands-on experience designed to give them a combination of practical skills and technical knowledge. The sequence can be completed in one year if taken full-time.

Certificate Requirements:
Course ID | Course Title | Hours |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGOR01</td>
<td>Animal Nutrition</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR44</td>
<td>Animal Breeding</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGL16</td>
<td>Horse Production</td>
<td>72</td>
</tr>
<tr>
<td>VOC AGL18</td>
<td>Horse Ranch Management</td>
<td>72</td>
</tr>
<tr>
<td>VOC AGL19</td>
<td>Horse Hoof Care</td>
<td>36</td>
</tr>
<tr>
<td>VOC AGL16</td>
<td>Animal Sanitation</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGL19</td>
<td>Disease Control</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>324</strong></td>
<td></td>
</tr>
</tbody>
</table>

 Interior Landscaping
SYS #118137
This certificate is designed to give students basic skills in the design, installation and maintenance of interior plants that are used in residences, offices, hotels, malls, restaurants and other locations. The sequence of courses can be completed in one year and is offered on an annual basis.
### Community Education

**Landscape Design and Construction**
**SYS #919610**

This certificate is designed to give students basic skills needed in employment with a landscape contractor. The sequence can be completed in one year and is offered on an annual basis and can be completed in two years. Courses are offered both Fall and Spring semesters. Some courses will provide transfer articulation with colleges and universities offering a Bachelor of Science Degree in Horticulture.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGOR01</td>
<td>Horticultural Science</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR13</td>
<td>Landscape Design</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR29</td>
<td>Ornamental Plants — Herbaceous</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR30</td>
<td>Ornamental Plants — Trees and Woody Shrubs</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR50</td>
<td>Soil Science and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR51</td>
<td>Tractor and Landscape Equipment Operations</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR62</td>
<td>Landscape Irrigation — Design and Installation</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR71</td>
<td>Landscape Construction Fundamentals</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR72</td>
<td>Landscape Irrigation – Drip and Low Volume</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours:** 486

**Landscape Irrigation**
**SYS #327645**

This certificate is designed to give students basic skills in irrigation design, repair, installation, water management and troubleshooting. It can be completed in one year and is offered on an annual basis and can be completed in two years. Jobs are plentiful with landscape contractors, schools, parks and cities.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGOR01</td>
<td>Horticultural Science</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR13</td>
<td>Landscape Design</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR39</td>
<td>Turf Grass Production and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR50</td>
<td>Soil Science and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR51</td>
<td>Tractor and landscape Equipment Operations</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR62</td>
<td>Landscape Irrigation — Design and Installation</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR63</td>
<td>Landscape Irrigation System Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR64</td>
<td>Landscape Irrigation — Drip and Low Volume</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR71</td>
<td>Landscape Construction Fundamentals</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours:** 486

**Livestock Management**
**SYS #333598**

This certificate is designed to give students basic skills in livestock management for employment opportunities on farms, ranches and agriculture sales and services. This sequence is offered on an annual basis and can be completed in two years.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGOR01</td>
<td>Horticultural Science</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR13</td>
<td>Landscape Design</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR32</td>
<td>Landscape and Nursery Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR39</td>
<td>Turf Grass Production and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR62</td>
<td>Landscape Irrigation — Design and Installation</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR64</td>
<td>Landscape Irrigation — Drip and Low Volume</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours:** 495

**Nursery Management**
**SYS #703868**

This certificate is designed to give students basic skills in production and marketing of plants and dry goods in the wholesale and retail nursery industry. The sequence is offered on an annual basis and can be completed in one year.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGOR01</td>
<td>Horticultural Science</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR02</td>
<td>Plant Propagation/ Greenhouse Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR24</td>
<td>Integrated Pest Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR29</td>
<td>Ornamental Plants — Herbaceous</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR30</td>
<td>Ornamental Plants — Trees and Woody Shrubs</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR32</td>
<td>Landscaping and Nursery Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR39</td>
<td>Turf Grass Production and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR62</td>
<td>Landscape Irrigation — Design and Installation</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR64</td>
<td>Landscape Irrigation — Drip and Low Volume</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours:** 630

**Park Management**
**SYS #314920**

This certificate is designed to enable students to prepare for a career in park management, and provides students with hands-on experience, designed to give them a combination of practical skills and technical knowledge. The sequence of courses is offered on an annual basis and can be completed in one year.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGOR11</td>
<td>Animal Sanitation and Disease Control</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR12</td>
<td>Animal Sanitation and Disease Control</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR13</td>
<td>Animal Sanitation and Disease Control</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR14</td>
<td>Animal Sanitation and Disease Control</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR15</td>
<td>Animal Sanitation and Disease Control</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours:** 648

**Pet Science**
**SYS #525556**

This certificate is designed to enable students to enter the retail or wholesale pet industry. Most of the courses in this certificate are offered every Fall and Spring semester. Five of the courses are offered in the evening only and are rotated over four semesters. Thus, the sequence can be completed in two years.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGAN01</td>
<td>Animal Science</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGAN02</td>
<td>Animal Nutrition</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGAN51</td>
<td>Animal Handling and Restraint</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGAN94</td>
<td>Animal Breeding</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGLH96</td>
<td>Animal Sanitation and Disease Control</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGPE70</td>
<td>Pet Shop Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGPE71</td>
<td>Canine Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGPE72</td>
<td>Feline Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGPE73</td>
<td>Tropical and Coldwater Fish Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGPE74</td>
<td>Reptile Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGPE75</td>
<td>Aviculture — Cage and Aviary Birds</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM66</td>
<td>Small Business Management</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours:** 540
### Sports Turf Management
**SYS #332420**

This certificate is designed to provide skills required for students interested in employment at golf courses, race tracks, athletic fields and stadiums, and other high-use turf areas. The sequence can be completed in one year and is offered on an annual basis.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGOR01</td>
<td>Horticultural Science</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR24</td>
<td>Integrated Pest Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR30</td>
<td>Ornamental Plants – Trees and Woody Shrubs</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR39</td>
<td>Turf Grass Production and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR40</td>
<td>Sports Turf Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR50</td>
<td>Soil Science and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR51</td>
<td>Tractor and Landscape</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR52</td>
<td>Equipment Operations</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR62</td>
<td>Landscape Irrigation – Design and Installation</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR63</td>
<td>Landscape Irrigation Systems – Management</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours**: 486

### Tree Care and Maintenance
**SYS #182769**

This certificate is designed to give students basic skills in the repair and maintenance of trees. The sequence can be completed in one year and the courses are offered on an annual basis.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC AGOR01</td>
<td>Horticultural Science</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR24</td>
<td>Integrated Pest Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR30</td>
<td>Ornamental Plants – Trees and Woody Shrubs</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR32</td>
<td>Landscape and Nursery Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR50</td>
<td>Soil Science and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR51</td>
<td>Tractor and Landscape</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR52</td>
<td>Equipment Operations</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR53</td>
<td>Small Engine Repair 1</td>
<td>54</td>
</tr>
<tr>
<td>VOC AGOR75</td>
<td>Urban Absculture</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours**: 432

### Business Management – Level 1
**SYS #181545**

The Business Management – Level 1 Certificate is designed to introduce the student to the role of management in business. Students will be exposed to the terms, trends, organizational structure, and opportunities inherent in business management. The Department has sequenced courses to maximize student time, and there are four emphasis areas: Business Management, Human Resource Management, International Business or Small Business Management. Courses are offered on an annual basis, and each level of Business Management emphasis can be completed in one semester.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSM20</td>
<td>Principles of Business</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM61</td>
<td>Business Organization and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSS36</td>
<td>Principles of Marketing</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours**: 162

### Business Management – Level 2
**SYS #245391**

The Business Management – Level 2 Certificate builds upon the Level 1 certificate to provide students with proven business tools that will enhance their management careers. Students will be exposed to projects and business simulations that will lead to measurable success. The Department has sequenced courses to maximize student time, and there are four emphasis areas: Business Management, Human Resource Management, International Business or Small Business Management. Courses are offered on an annual basis, and each level of Business Management emphasis can be completed in one semester.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSM20</td>
<td>Principles of Business</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM61</td>
<td>Business Organization and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSS36</td>
<td>Principles of Marketing</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours**: 180

### Business Management – Level 3
**SYS #965642**

Upon completion of the Business Management – Level 3 Certificate, students will have built a foundation of management strategies and practices which will enable them to prosper in an ever-changing business environment. The Department has sequenced courses to maximize student time, and there are four emphasis areas: Business Management, Human Resource Management, International Business or Small Business Management. Courses are offered on an annual basis, and each level of Business Management emphasis can be completed in one semester.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSM20</td>
<td>Principles of Business</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM61</td>
<td>Business Organization and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSS36</td>
<td>Principles of Marketing</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours**: 198

### Human Resource Management
**SYS #152977**

This introductory certificate exposes students to the world of human resources. Students become familiar with various approaches to human resource management and the strategic nature of human resources. The Department has sequenced courses to maximize student time, and there are four emphasis areas: Business Management, Human Resource Management, International Business or Small Business Management. Courses are offered on an annual basis, and the Human Resource Management Certificate can be completed in one semester.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSM20</td>
<td>Principles of Business</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM61</td>
<td>Business Organization and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSS36</td>
<td>Principles of Marketing</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours**: 162

### International Business – Level 1
**SYS #665499**

This specialized business certificate is intended to prepare the student to work in the unique and dynamic environment of international business. The program also prepares the student as a business management generalist for companies conducting international trade. The Department has sequenced courses to maximize student time, and there are four emphasis areas: Business Management, Human Resource Management, International Business or Small Business Management. Courses are offered on an annual basis, and each level of International Business emphasis can be completed in one semester.

**Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSM20</td>
<td>Principles of Business</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM51</td>
<td>Principles of International Business</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSS36</td>
<td>Principles of Marketing</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours**: 162

### International Business – Level 2
**SYS #745751**

In the International Business – Level 2 Certificate, the student will learn methods and approaches to managing the complexities of doing business in an international environment. Students acquire both theoretical knowledge and practical skills related to managing and marketing within the global arena. The Department has sequenced courses to maximize student time, and there are four emphasis areas: Business Management, Human Resource Management, International Business or Small Business Management. Courses are offered on an annual basis, and each level of International Business emphasis can be completed in one semester.

**Certificate Requirements:**

<table>
<thead>
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<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSM20</td>
<td>Principles of Business</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM61</td>
<td>Business Organization and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSS36</td>
<td>Principles of Marketing</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Hours**: 162
Small Business Management – Level 1

SYS #563137

Small business has been described as the engine of change within the economy. The Small Business Management – Level 1 Certificate exposes the student to the fundamentals of managing and planning a small business. The Department has sequenced courses to maximize student time, and there are four emphasis areas: Business Management, Human Resource Management, International Business or Small Business Management. Courses are offered on an annual basis, and each level of Small Business Management emphasis can be completed in one semester.

Certificate Requirements:
Completion of Small Business Management – Level 1 (162 hours)
Small Business Management – Level 2 (162 hours)

PLUS the following:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSM20</td>
<td>Principles of Business</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM66</td>
<td>Small Business Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC BS536</td>
<td>Principles of Marketing</td>
<td>54</td>
</tr>
</tbody>
</table>

Total Hours: 162

Small Business Management – Level 3

SYS #Pending

Upon completion of the Small Business Management – Level 3 Certificate, the student will have built a foundation of management strategies and practices which enable them to prosper in an ever-changing small business environment. The Department has sequenced courses to maximize student time, and there are four emphasis areas: Business Management, Human Resource Management, International Business or Small Business Management. Courses are offered on an annual basis, and each level of Small Business Management emphasis can be completed in one semester.

Certificate Requirements:
Completion of:
Small Business Management – Level 1 (162 hours)
Small Business Management – Level 2 (162 hours)
PLUS the following:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSM07</td>
<td>Principles of Accounting – Financial</td>
<td>90</td>
</tr>
<tr>
<td>VOC BSM10</td>
<td>Principles of Continuous Quality Improvement</td>
<td>54</td>
</tr>
<tr>
<td>VOC CSB15</td>
<td>Microcomputer Applications</td>
<td>72</td>
</tr>
</tbody>
</table>

Total Hours: 216

Computer and Networking Technology – Level I

SYS #591657

This certificate is intended to prepare students to enter the computer and networking fields as service technicians with foundations in basic electronics, telecommunications, computer servicing and networking servicing. This sequence is offered annually and can be completed in two years. Students are guided by written information regarding term offerings and correct course selection.

Certificate Requirements:
Completion of Small Business Management – Level 1 (162 hours)

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC BSM60</td>
<td>Human Relations in Business</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM61</td>
<td>Business Organization and Management</td>
<td>54</td>
</tr>
<tr>
<td>VOC BSM62</td>
<td>Human Resource Management</td>
<td>54</td>
</tr>
</tbody>
</table>

Total Hours: 162

Computer and Networking Technology – Level II

SYS #592137

This is the second offering of the Computer and Networking Technology, Level I. The sequence is offered annually and can be completed in two years.

Certificate Requirements:
Completion of:
Computer and Networking Technology – Level I (162 hours)

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC CNETS0</td>
<td>PC Servicing</td>
<td>72</td>
</tr>
<tr>
<td>VOC CNETS2</td>
<td>PC Operating Systems</td>
<td>72</td>
</tr>
<tr>
<td>VOC CNETS4</td>
<td>PC Troubleshooting</td>
<td>72</td>
</tr>
<tr>
<td>VOC CNETS0</td>
<td>A+ Certification Preparation</td>
<td>54</td>
</tr>
<tr>
<td>VOC EL11</td>
<td>Technical Applications in Microcomputers</td>
<td>54</td>
</tr>
</tbody>
</table>

Total Hours: 522

Electronic Assembly and Fabrication

SYS #352346

This certificate prepares students to enter the electronics field as assembly and fabrication technicians. The sequence is offered on an annual basis and can be completed in one year.

Certificate Requirements:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC CSB15</td>
<td>Microcomputer Applications</td>
<td>72</td>
</tr>
<tr>
<td>VOC EL50A</td>
<td>Electronics Theory</td>
<td>36</td>
</tr>
<tr>
<td>VOC EL50AL</td>
<td>Electronics Laboratory</td>
<td>18</td>
</tr>
<tr>
<td>VOC EL50B</td>
<td>Electronics Theory</td>
<td>36</td>
</tr>
<tr>
<td>VOC EL50BL</td>
<td>Electronics Laboratory</td>
<td>18</td>
</tr>
<tr>
<td>VOC EL56</td>
<td>Digital Electronics</td>
<td>54</td>
</tr>
<tr>
<td>VOC EL56L</td>
<td>Digital Electronics Laboratory</td>
<td>18</td>
</tr>
</tbody>
</table>

Total Hours: 576

Computer Systems Technology

SYS #622137

The Computer Systems Technology curriculum encompasses advanced coursework in computer systems technology. This includes microprocessor programming codes and microprocessor interfacing circuits. This sequence is offered annually and can be completed in two years.

Certificate Requirements:
Completion of:
Computer and Networking Technology – Level I (162 hours)

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC EL11</td>
<td>Technical Applications in Microcomputers</td>
<td>54</td>
</tr>
<tr>
<td>VOC EL12</td>
<td>Computer Simulation and Troubleshooting</td>
<td>36</td>
</tr>
<tr>
<td>VOC EL50A</td>
<td>Electronics Theory</td>
<td>36</td>
</tr>
<tr>
<td>VOC EL50AL</td>
<td>Electronics Laboratory</td>
<td>18</td>
</tr>
<tr>
<td>VOC EL50B</td>
<td>Electronics Theory</td>
<td>36</td>
</tr>
<tr>
<td>VOC EL50BL</td>
<td>Electronics Laboratory</td>
<td>18</td>
</tr>
<tr>
<td>VOC EL51</td>
<td>Electronic Devices Theory</td>
<td>54</td>
</tr>
<tr>
<td>VOC EL51L</td>
<td>Electronic Devices Laboratory</td>
<td>18</td>
</tr>
<tr>
<td>VOC EL56</td>
<td>Digital Electronics</td>
<td>54</td>
</tr>
<tr>
<td>VOC EL56L</td>
<td>Digital Electronics Laboratory</td>
<td>18</td>
</tr>
<tr>
<td>VOC EL61</td>
<td>Electronics Assembly and Fabrication</td>
<td>36</td>
</tr>
<tr>
<td>VOC EL74</td>
<td>Microprocessor Systems</td>
<td>54</td>
</tr>
<tr>
<td>VOC EL74L</td>
<td>Microprocessor Systems Laboratory</td>
<td>18</td>
</tr>
<tr>
<td>VOC ELM65A</td>
<td>Mathematics of Electronics</td>
<td>36</td>
</tr>
<tr>
<td>VOC ELM65B</td>
<td>Mathematics of Electronics</td>
<td>36</td>
</tr>
</tbody>
</table>

Total Hours: 360

Electronic Cabling and Wiring Technology – Level 1

SYS #365847

This certificate provides skills in the areas of low voltage cable and wire installations used in the telephone industry, computer networks, home theater, automation and security systems. The Level 1 certificate can be completed in one semester. The student can also complete Level 2 in one semester. The sequence is offered annually. The College offers this program in cooperation with the Pomona Unified School District – Village Academy.

Certificate Requirements:
Completion of:
Computer Systems Technology (162 hours)

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC EST50</td>
<td>Electrical Fundamentals for Cable Installations</td>
<td>72</td>
</tr>
<tr>
<td>VOC EST52</td>
<td>Fabrication Techniques</td>
<td>72</td>
</tr>
<tr>
<td>VOC EL11</td>
<td>Technical Applications in Microcomputers</td>
<td>54</td>
</tr>
</tbody>
</table>

Total Hours: 270

Electronic Cabling and Wiring Technology – Level 2

SYS #582715

This certificate provides skills in the areas of low voltage cable and wire installations used in the telephone industry, computer networks, home theater, automation and security systems. Level 2 certification includes customer relations and advanced skills at the systems level in voice, video and data cable and wire systems and the setup, maintenance, and troubleshooting of home theater systems, home automation and security systems.
Level 2 is a continuation of Level 1 and can be completed in one semester. This sequence is offered annually in cooperation with the Pomona Unified School District – Village Academy.

Certificate Requirements:
Completion of Electronic Cabling and Wiring Technology Level 1 Certificate (270 hours)

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>VOC EST54</td>
<td>Cabling and Wiring Standards</td>
<td>72</td>
</tr>
<tr>
<td>VOC EST56</td>
<td>Home Theater and Home Automation Systems</td>
<td>72</td>
</tr>
<tr>
<td>VOC EL60</td>
<td>Customer Relations for the Technician</td>
<td>18</td>
</tr>
</tbody>
</table>

Total Hours: **162**

Recommended Electives:
- VOC EL61 Electronic Assembly and Fabrication
- VOC EL62 Advanced Surface Mount Assembly and Rework

Electronic Systems Technology – Level 1
SYS #259025

Develops skills in electrical fundamentals, fabrication techniques, cabling and wiring standards for cable and wire systems (copper, coax, fiber and structured cables) and basic computer skills in word processing, spreadsheets, database and the Internet. Courses are offered Fall and Spring semesters and the certificate can be completed in one year.

Certificate Requirements:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC EST50</td>
<td>Electrical Fundamentals for Cable Installations</td>
<td>108</td>
</tr>
<tr>
<td>VOC EST52</td>
<td>Fabrication Techniques for Cable Installations</td>
<td>108</td>
</tr>
<tr>
<td>VOC EST54</td>
<td>Cabling and Wiring Standards</td>
<td>108</td>
</tr>
<tr>
<td>VOC EL11</td>
<td>Technical Applications in Microcomputers</td>
<td>54</td>
</tr>
<tr>
<td>VOC CS815</td>
<td>Microcomputer Applications</td>
<td>72</td>
</tr>
</tbody>
</table>

Total Hours: **450**

Electronic Systems Technology – Level 2
SYS #174983

This Level 2 certificate builds on the skills and concepts learned in level 1 and adds customer relations (soft skills) and the installation, calibration, setup, maintenance and troubleshooting of home theater systems, home automation and home security systems. Courses in the sequence are offered Fall and Spring semesters, and the certificate can be completed in one year.

Certificate Requirements:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC EST56</td>
<td>Home Theater and Home Automation Systems</td>
<td>108</td>
</tr>
<tr>
<td>VOC EST62</td>
<td>Electronic Troubleshooting – 1</td>
<td>108</td>
</tr>
<tr>
<td>VOC TCH60</td>
<td>Customer Relations for the Technician</td>
<td>18</td>
</tr>
<tr>
<td>VOC EST64</td>
<td>Electronic Troubleshooting – 2</td>
<td>108</td>
</tr>
<tr>
<td>VOC EST70</td>
<td>C-7 Low Voltage Systems License Preparation</td>
<td>36</td>
</tr>
<tr>
<td>VOC EL61</td>
<td>Electronic Assembly and Fabrication</td>
<td>72</td>
</tr>
<tr>
<td>VOC EL62</td>
<td>Advanced Surface Mount Assembly and Rework</td>
<td>72</td>
</tr>
</tbody>
</table>

Total Hours: **522**

Electronic Technology
SYS #670897

This one-year certificate is designed for the person requiring background in the basic core courses of electronic technology without an area of specialization. The core courses provide the necessary skills for entry-level employment as an electronic technician. If taken part-time, the sequence can be completed in two years. Students are guided by written information regarding term offering and correct course selection.

Certificate Requirements:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC EL11</td>
<td>Technical Applications in Microcomputers</td>
<td>54</td>
</tr>
<tr>
<td>VOC ELS3</td>
<td>Technical Applications in Microcomputers</td>
<td>36</td>
</tr>
<tr>
<td>VOC ELS5</td>
<td>Microcomputer Applications</td>
<td>54</td>
</tr>
<tr>
<td>VOC ELS6</td>
<td>Digital Electronics</td>
<td>54</td>
</tr>
<tr>
<td>VOC ELS7</td>
<td>Digital Electronics</td>
<td>54</td>
</tr>
<tr>
<td>VOC ELM65A</td>
<td>Mathematics of Electronics</td>
<td>36</td>
</tr>
<tr>
<td>VOC ELM65B</td>
<td>Mathematics of Electronics</td>
<td>36</td>
</tr>
</tbody>
</table>

Total Hours: **792**

Recommended Electives:
- VOC CP1A Computer Keyboarding
- VOC EDT11 Technical Engineering Drawing I
- VOC EL76 Radio Telephone Communications

Electronics and Computer – Engineering Technology
SYS #10399B

Students completing this certificate will have training in most areas of electronics including microprocessors and interfacing, electronic communications and industrial electronic controls. The sequence of courses is offered annually. The certificate can be completed in two years. Students are guided by written information regarding term offering and correct course selection.

Certificate Requirements:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC EL11</td>
<td>Technical Applications in Microcomputers</td>
<td>54</td>
</tr>
<tr>
<td>VOC ELS3</td>
<td>Technical Applications in Microcomputers</td>
<td>36</td>
</tr>
<tr>
<td>VOC ELS5</td>
<td>Microcomputer Applications</td>
<td>54</td>
</tr>
<tr>
<td>VOC ELS6</td>
<td>Digital Electronics</td>
<td>54</td>
</tr>
<tr>
<td>VOC ELS7</td>
<td>Digital Electronics</td>
<td>54</td>
</tr>
<tr>
<td>VOC ELM65A</td>
<td>Mathematics of Electronics</td>
<td>36</td>
</tr>
<tr>
<td>VOC ELM65B</td>
<td>Mathematics of Electronics</td>
<td>36</td>
</tr>
</tbody>
</table>

Total Hours: **594**

Industrial Electronics
SYS #612116

This certificate includes electronic devices for industrial controls and motor controls; including programmable logic controls using the Allen Bradley series of PLC’s running Windows ladder logic software. The sequence of courses can be completed in two years if taken part-time. Courses are offered on an annual basis.

Certificate Requirements:

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC EL11</td>
<td>Technical Applications in Microcomputers</td>
<td>54</td>
</tr>
<tr>
<td>VOC ELS5</td>
<td>Microcomputer Applications</td>
<td>36</td>
</tr>
<tr>
<td>VOC ELS6</td>
<td>Digital Electronics</td>
<td>36</td>
</tr>
<tr>
<td>VOC ELS7</td>
<td>Digital Electronics</td>
<td>36</td>
</tr>
<tr>
<td>VOC ELM65A</td>
<td>Mathematics of Electronics</td>
<td>36</td>
</tr>
<tr>
<td>VOC ELM65B</td>
<td>Mathematics of Electronics</td>
<td>36</td>
</tr>
</tbody>
</table>

Total Hours: **978**
COMMUNITY EDUCATION

COMMUNITY EDUCATION

Community Education

VOC ELS0A1 Electronics Laboratory 18
VOC ELS0B Electronic Theory 36
VOC ELS0B Electronics Laboratory 18
VOC ELS11 Electronic Devices Theory 54
VOC ELS11 Electronic Devices Laboratory 18
VOC ELS4A Industrial Circuits Theory 54
VOC ELS4A Industrial Circuits Laboratory 18
VOC ELS4B Industrial System Equipment 36
VOC ELS4B Industrial System Laboratory 18
VOC ELS6 Digital Electronics 54
VOC ELS6 Digital Electronics Laboratory 18
VOC ELS6 Electronics Assembly and Fabrication 36
VOC ELM65A Mathematics of Electronics 36
VOC ELM65B Electronics Laboratory 36
Total Hours 576

OCCUPATIONAL – HEALTH CAREERS

Certified Nursing and Acute Care Nursing Assistant
SYS #195561
This certificate program will prepare participants to work in both long-term and acute care facilities such as providing entry level, diverse, work opportunities in the ever growing health care field. For those planning on entering the health care field, this program incorporates all the necessary academic knowledge and skills to provide for immediate employment as a Certified Nurse Assistant. Students will earn a Nevada Health Careers Resource Center certification. This certificate is offered in both the Fall and Spring semesters.

Certificate Requirements:
Course ID Course Title Hours
VOC HTH01 Certified Nursing Assistant 170
VOC HTH04 Acute Care Nursing Assistant 88
VOC HTH05 Health Careers Resource Center 258+ AR

Health Care Interpreting
SYS #425877
Regulatory changes in health care now require health care agencies to provide health services in a linguistically and culturally sensitive manner. The need for trained interpreters is growing rapidly. Utilization levels, within the field, are expanding with future opportunities for growth and mobility.

The Health Care Interpreting Certificate is a 11 month program, designed to train bilingual and bicultural students to develop the awareness, knowledge and skills for effective language interpretation in health care settings. Through academic preparation, practical skills training, and service in community-based health care settings and educational organizations, HCA candidates will learn:

- Roles and responsibilities of an interpreter in a health care setting.
- Basic knowledge of common medical conditions, treatments, and procedures.
- Language and cultural nuances for specific health care consumers and providers.
- Application of interpreting skills in English and Spanish or Mandarin.

The program begins each fall semester and includes coursework, independent lab study, and a 6-week unpaid internship within a local healthcare facility. Certification is awarded after completion of the internship. Classes are arranged for the working student, and are scheduled evenings and Saturdays.

A cohort of students is admitted each fall semester and completes the certificate at the end of the following summer session.

Certificate Requirements:
Course ID Course Title Hours
VOC HTH12 Medical Terminology 54
VOC ANAT50 Basic Anatomy and Physiology 54
VOC HTH12 Interpreting in Health Care Setting 1 84
VOC HTH14 Interpreting in Health Care Setting 2 84
VOC HTH05 Health Careers Resource Center 112
VOC HTH15 Externship in Health Care Interpreting 48
VOC HTH20 Health Care Interpreter Seminar 12
Total Hours 520

Basic Requirements:
Applicants should have advanced academic proficiency in English, both spoken and written, and should be equally proficient in their native language.

To enroll in this program, you must attend an information meeting and complete the English assessment. For further information and mailed announcements of meeting dates, call VESL Registration at (909) 594-5611, ext. 5268.

OCCUPATIONAL – MACHINING

parametric solid modeling
SYS #464958
With the strong relationship between AutoCAD and manufacturing, this mini certificate guides the student through AutoDesk’s 2-D and 3-D and other software packages used in the manufacturing industry. The sequence can be completed in three semesters.

Certificate Requirements:
Course ID Course Title Hours
VOC MFG17 3-D CAD – Mechanical Modeling 36
VOC MFG19 Parametric Solid Modeling for Manufacturing 36
VOC MFG38 MasterCAM I 36
VOC MFG38B Advanced MasterCAM 36
VOC MFG38C MasterCAM Solids 36
VOC MFG39 SurfCAM I 36
VOC MFG39B SurfCAM II 36
VOC MFG58 Blueprint Reading for Manufacturing 36
VOC MFG70 Technical Mathematics – Manufacturing Applications 36
VOC MFG85 Manual CNC (Computerized Numerical Control) Operations 36
SurfCAM
SYS #255843
This certificate is a direct employment pathway for manufacturing students who wish to write, edit, download, and run Computerized Numerical Control (CNC) machines, and provides a strong background in the basics of both manual and CNC machines. The sequence can be completed in one year and is a highly specialized occupation.

Certificate Requirements:
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC MFG11</td>
<td>Manufacturing Processes I</td>
<td>36</td>
</tr>
<tr>
<td>VOC MFG39</td>
<td>SurfCAM I</td>
<td>36</td>
</tr>
<tr>
<td>VOC MFG9B</td>
<td>SurfCAM II</td>
<td>36</td>
</tr>
<tr>
<td>VOC MFG65</td>
<td>Manual CNC (Computerized</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Numerical Control) Operations</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 180

OCCUPATIONAL – OFFICE TECHNOLOGY

Administrative Assistant – Level I
SYS #736281
Prepares students for entry-level clerical positions where keyboarding is the primary function. The sequence can be completed in one year and courses are offered both Fall and Spring semesters.

Certificate Requirements:
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC B5005</td>
<td>Business English</td>
<td>54</td>
</tr>
<tr>
<td>VOC CP01A</td>
<td>Computer Keyboarding, or</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>Business Keyboarding</td>
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</tr>
<tr>
<td>VOC CP01B</td>
<td>Computer Keyboarding</td>
<td>36</td>
</tr>
<tr>
<td>VOC CP12</td>
<td>Office Computer Applications, or</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>Microsoft Computer</td>
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</tr>
<tr>
<td></td>
<td>Applications</td>
<td></td>
</tr>
<tr>
<td>VOC CP18</td>
<td>Data Entry</td>
<td>54</td>
</tr>
</tbody>
</table>

Total Hours 252

Desktop Publishing
SYS #162526
This sequence of courses will afford career opportunities in businesses desiring desktop publishing skills. The certificate can be completed in one year and courses are offered annually, including Summer and Winter Intersessions.

Certificate Requirements:
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC CP02</td>
<td>Intermediate Computer</td>
<td>72</td>
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<tr>
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<td>Keyboarding</td>
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<tr>
<td>VOC CP12</td>
<td>Office Computer Applications, or</td>
<td>72</td>
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<tr>
<td></td>
<td>Microsoft Computer</td>
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<tr>
<td></td>
<td>Applications</td>
<td></td>
</tr>
<tr>
<td>VOC CP18</td>
<td>Data Entry</td>
<td>54</td>
</tr>
</tbody>
</table>

Total Hours 270

Data Entry
SYS #234664
This certificate is intended to prepare students for employment as data entry operators, customer service representatives, receptionists, or entry-level office support staff positions. Training in a variety of computer skills is emphasized. The sequence is offered annually and can be completed in one year.

Certificate Requirements:
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC CP02</td>
<td>Intermediate Computer</td>
<td>72</td>
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<td>Keyboarding</td>
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<tr>
<td>VOC CP12</td>
<td>Office Computer Applications, or</td>
<td>72</td>
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<td></td>
<td>Microsoft Computer</td>
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</tr>
<tr>
<td></td>
<td>Applications</td>
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</tr>
<tr>
<td>VOC CP18</td>
<td>Data Entry</td>
<td>54</td>
</tr>
</tbody>
</table>

Total Hours 252

Administrative Assistant – Level 2
SYS #316457
This certificate prepares students for clerical positions where office organization and transcription skills are needed. The sequence can be completed in one year, and courses are offered both Fall and Spring semesters.

Certificate Requirements:
Completion of Administrative Assistant – Level I Certificate (396 hours)

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC B5025</td>
<td>Business Communications</td>
<td>54</td>
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<tr>
<td>VOC CP02</td>
<td>Intermediate Computer</td>
<td>72</td>
</tr>
<tr>
<td>VOC CP20</td>
<td>Word for the Business</td>
<td>72</td>
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<tr>
<td></td>
<td>Professional, or</td>
<td></td>
</tr>
<tr>
<td>VOC CP68</td>
<td>Transcription Techniques</td>
<td>54</td>
</tr>
</tbody>
</table>

Total Hours 252

Medical Office Specialist
SYS #137648
The courses in this certificate are intended to prepare students for employment as entry-level medical office assistants, medical receptionists, administrative assistants, medical, medical office managers or other office support staff in the medical field. This sequence is offered on an annual basis and can be completed in two years.

Certificate Requirements:
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>VOC B5A72</td>
<td>Bookkeeping – Accounting</td>
<td>90</td>
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<td>VOC B5005</td>
<td>Business English</td>
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<td>VOC B5025</td>
<td>Business Communications</td>
<td>54</td>
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<tr>
<td>VOC CP01</td>
<td>Computer Keyboarding</td>
<td>72</td>
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<tr>
<td>VOC CP02</td>
<td>Intermediate Computer</td>
<td>72</td>
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<tr>
<td>VOC CP12</td>
<td>Office Computer Applications, or</td>
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<tr>
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<td>Microsoft Computer</td>
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<tr>
<td></td>
<td>Applications</td>
<td></td>
</tr>
<tr>
<td>VOC CP18</td>
<td>Data Entry</td>
<td>54</td>
</tr>
<tr>
<td>VOC CP20</td>
<td>Microsoft Word, or</td>
<td>72</td>
</tr>
<tr>
<td>VOC CP28</td>
<td>Office Management Skills</td>
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</tr>
<tr>
<td>VOC CP68</td>
<td>Transcription Techniques</td>
<td>54</td>
</tr>
<tr>
<td>VOC HTH12</td>
<td>Medical Terminology</td>
<td>54</td>
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</tbody>
</table>

Total Hours 774

Office Computer Applications
SYS #534470
This certificate in Office Computer Applications is customized to meet the needs of the entry-level adult student or professional, who is seeking to acquire an array of office computer skills required in a computerized office environment. This sequence of courses can be completed in one year and is offered on an annual basis.

Certificate Requirements:
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>VOC CP-BC1</td>
<td>Basic Computing – Level 1</td>
<td>51</td>
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<tr>
<td>VOC CP-BC2</td>
<td>Basic Computing – Level 2</td>
<td>48</td>
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<tr>
<td>VOC CP-BC3</td>
<td>Basic Computing – Level 3</td>
<td>48</td>
</tr>
<tr>
<td>VOC CP-NET</td>
<td>Internet Research – An Introduction</td>
<td>23</td>
</tr>
<tr>
<td>VOC CP-CC</td>
<td>Creative Computing</td>
<td>51</td>
</tr>
</tbody>
</table>

Total Hours 221

COMPUTER GRAPHICS 

CONTRIBUTING PROGRAM

Community Education

OCCUPATIONAL – PHOTOGRAPHICS

Computer Graphics Design / Photography
SYS #235898
This certificate will enable the student to develop specific computer skills needed for employment. The Computer Graphics Certificate is an option under the Photography program. The sequence can be completed in one year full-time or two years part-time. Employment will vary among several industries such as computer gaming, movie production, music video production, commercials and animation.

Certificate Requirements:
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC GRP1</td>
<td>Computer Graphics Lab</td>
<td>18</td>
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<tr>
<td>VOC GRP10</td>
<td>Photo Editing with Photoshop</td>
<td>54</td>
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<tr>
<td></td>
<td>Advanced Photo Editing with</td>
<td></td>
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<tr>
<td></td>
<td>Photoshop</td>
<td></td>
</tr>
<tr>
<td>VOC GRP14</td>
<td>Digital Color Management</td>
<td>54</td>
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<tr>
<td>VOC GRP16</td>
<td>Digital Image Design with</td>
<td>54</td>
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<tr>
<td></td>
<td>Illustrator &amp; Freehand</td>
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</tr>
<tr>
<td>VOC GRP20</td>
<td>Applying Photos and Images</td>
<td>54</td>
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<tr>
<td></td>
<td>in Multimedia</td>
<td></td>
</tr>
<tr>
<td>VOC GRP28</td>
<td>Digital Portfolio</td>
<td>36</td>
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<tr>
<td>VOC PH010</td>
<td>Basic Digital and Film</td>
<td>54</td>
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<tr>
<td></td>
<td>Photography</td>
<td></td>
</tr>
<tr>
<td>VOC PH017</td>
<td>Photocommunications</td>
<td>54</td>
</tr>
</tbody>
</table>

Total Hours 432
Community Education

Recommended Electives:
The Photographics faculty recommends that you complement your studies with selected elective courses listed below. You should meet with a professor of Computer Graphics Design/Photography to help you determine which electives would best suit your career plans.

VOC CP10 Operating the Macintosh Computer
VOC GRP18 Advanced Image Design
VOC PHO01 Laboratory Studies: Black and White Photography
VOC PHO02 Laboratory Studies: Color Photography
VOC PHO04 Digital Cameras and Composition

Photography
SYS #320382
This certificate is designed to prepare students to develop specific skills needed for employment in photography, art, cinema/animation, communications, industrial arts, graphics and journalism. The sequence of courses is offered on an annual basis and the certificate can be completed in two years.

Certificate Requirements:
Course ID Course Title Hours
VOC GRP10 Photo Editing with Photoshop 54
VOC PHO10 Basic Digital and Film Photography 54
VOC PHO11 Advanced Professional Photography 72
VOC PHO12 Photographic Alternatives, etc. 54
VOC PHO21 Exploring Color Photography 54
VOC PHO16 Fashion Photography, etc. 54
VOC PHO18 Portraiture and Wedding Photography 54
VOC PHO17 Photocommunication 54
VOC PHO20 Color Photography 54
VOC PHO28 Photography Portfolio Development 36
VOC PHO30 Commercial and Illustrative Photography 54
Total Hours 594

Recommended Electives:
The Photographics faculty recommends that you complement your studies with selected elective courses listed below. You should meet with a professor of Computer Graphics Design/Photography to help you determine which electives would best suit your career plans.

VOC GRP12 Advanced Photo Editing with Photoshop
VOC PHO01 Laboratory Studies: Black and White Photography
VOC PHO02 Laboratory Studies: Color Photography
VOC PHO15 History of Photography

OCCUPATIONAL – SPECIAL NEEDS POPULATION

Job Readiness Skills
SYS #798265
(Received Valley Training Center)
This certificate provides hands-on job training in computer and assembly skills for the entry-level worker. Participants will improve their opportunities for employment and career advancement. The sequence can be completed in one year and is offered on an annual basis.

Certificate Requirements:
Course ID Course Title Hours
VOC CIS-CD Computer Operations 480
VOC MFG-AR Assembly/Repair Skills 480
Total Hours 960

Welding
SYS #340189
This certificate is designed to prepare students for employment in the broad field of welding, leading to occupations in manufacturing, repair and construction. It prepares students to test for the Structural Welding Certificate and can be completed in one year.

Certificate Requirements:
Course ID Course Title Hours
VOC WLD40 Introduction to Welding 36
VOC WLD50 Oxyacetylene Welding 36
VOC WLD51 Basic Electric Arc Welding 36
VOC WLD53A Welding Metallurgy 54
VOC WLD60 Print Reading and Computations for Welders 54
VOC WLD70A Beginning Arc Welding 54
VOC WLD70B Intermediate Arc Welding 54
VOC WLD70C Certification for Welding 54
VOC WLD80 Fabrication and Construction Welding 54
VOC WLD81 Pipe and Tube Welding 54
Total Hours 486

Recommended Electives:
The Welding faculty recommends that students complement their studies with selected elective courses chosen from the list below. Students should meet with a professor of Welding to help you determine which of those electives would best suit your career plans.

VOC MFG70 Technical Mathematics – Manufacturing Applications
VOC WLD60 Print Reading and Computations for Welders
VOC WLD70C Certification for Welders

Licensed Welder
SYS #919193
This certificate is designed to prepare students for entry-level employment as a licensed welder in the broad field of welding, including manufacturing, construction, fabrication and repair. Through theoretical and hands-on skills coursework, students prepare for industry licensing with an understanding of current guidelines and standards. Particular emphasis is placed on those competencies required for certification in structural steel welding. Course sequences can be modified to reflect industry experience or other individual needs.

Certificate Requirements:
Course ID Course Title Hours
VOC WLD40 Introduction to Welding 36
VOC WLD50 Oxyacetylene Welding 36
VOC WLD51 Basic Electric Arc Welding 36
VOC WLD53A Welding Metallurgy 54
VOC WLD60 Print Reading and Computations for Welders 54
VOC WLD70A Beginning Arc Welding 54
VOC WLD70B Intermediate Arc Welding 54
VOC WLD70C Certification for Welding 54
VOC WLD80 Fabrication and Construction Welding 54
VOC WLD81 Pipe and Tube Welding 54
Total Hours 486

Welder with Concentration in Automotive Welding, Cutting & Modification
SYS #483743
Preparation as a Licensed Welder with additional skills and theoretical development in automotive welding, cutting and modification.

Certificate Requirements:
Completion of Licensed Welder Certificate (486 hours)
Course ID Course Title Hours
VOC WLD90A Automotive Welding, Cutting & Modification 54

Welder with Concentration in Gas Tungsten Arc Welding
SYS #108929
Preparation as a Licensed Welder with additional skills and theoretical development in gas tungsten ARC welding.

Certificate Requirements:
Completion of Licensed Welder Certificate (486 hours)
Course ID Course Title Hours
VOC WLD90A Gas Tungsten Arc Welding 54

Welder with Concentration in Semiautomatic ARC Welding
SYS #460640
Preparation as a Licensed Welder with additional skills and theoretical development in Semiautomatic ARC Welding.

Certificate Requirements:
Completion of Licensed Welder Certificate (486 hours)
Course ID Course Title Hours
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- Vice Control... 241

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<tbody>
<tr>
<td>Food Production, Land Use and Politics – A Global Perspective</td>
<td>Accounting, Fundamentals of</td>
<td>A+ Certification Preparation</td>
<td>Communications Circuits Theory/Laboratory</td>
<td></td>
</tr>
<tr>
<td>Home Gardening</td>
<td>Accounting, Payroll and Tax</td>
<td>Home Theater, Home Integration and Home Security Systems</td>
<td>Computer Simulation and Troubleshooting</td>
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<tr>
<td>Horse Behavior and Training</td>
<td>Accounting, Principles of Financial</td>
<td>Correctional Science, Introduction to</td>
<td>Customer Relations for the Technician</td>
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<td>Horse Hoof Care</td>
<td>Bookkeeping – Accounting</td>
<td>Crime and Delinquency</td>
<td>Digital Electronics Lecture/Laboratory</td>
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<td>Horse Ranch Management</td>
<td>Business Communications</td>
<td>Ethnic Relations in Corrections</td>
<td>Electronic Devices Theory/Laboratory</td>
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<td>Horse Production</td>
<td>Business English</td>
<td>Interviewing and Counseling in Corrections</td>
<td>Electronic Assembly and Fabrication Lecture/Laboratory</td>
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<td>Horticultural Science</td>
<td>Business Mathematics</td>
<td>Probation and Parole</td>
<td>Electronics Technology, Laboratory Studies</td>
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<td>Hydraulics</td>
<td>Business Organization and Management</td>
<td>Violent Offender, The</td>
<td>Electronics Theory/Laboratory</td>
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<tr>
<td>Interior Landscaping</td>
<td>Business Vocabulary</td>
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<td>Industrial Circuits Theory/Laboratory</td>
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<td>Integrated Pest Management</td>
<td>Business, Principles of</td>
<td>Ten-Key Calculations</td>
<td>Industrial Electronic Systems/Laboratory</td>
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<tr>
<td>Landscape Construction Fundamentals</td>
<td>Continuous Quality Improvement (CQI), Principles of</td>
<td></td>
<td>Mathematics of Electronics</td>
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<tr>
<td>Landscape Design</td>
<td>Continuous Quality Improvement (CQI), Team Building</td>
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<td>Mathematics of Electronics – AC</td>
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<tr>
<td>Landscape Hardy Applications</td>
<td>Exporting and Importing, Principles of</td>
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<tr>
<td>Landscape and Nursery Management</td>
<td>Financial Planning</td>
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<tr>
<td>Landscaping Laws – Contracting and Estimating</td>
<td>Human Relations in Business</td>
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<tr>
<td>Landscape Irrigation – Design and Installation</td>
<td>Human Resource Management</td>
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<tr>
<td>Landscape Irrigation – Drip and Low Volume</td>
<td>International Business, Principles of</td>
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<tr>
<td>Landscape Irrigation – Systems Management</td>
<td>International Marketing Concepts</td>
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<tr>
<td>Livestock Judging and Selection</td>
<td>Marketing, Principles of</td>
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<td>Ornamental Plants – Herbaceous</td>
<td>Microcomputer Applications</td>
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<tr>
<td>Ornamental Plants – Trees and Woody Shrubs</td>
<td>Oral Communications for Business</td>
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<tr>
<td>Park Facilities</td>
<td>Professional Selling</td>
<td></td>
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<tr>
<td>Park Management</td>
<td>Real Estate Practice</td>
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<tr>
<td>Pet Shop Management</td>
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#### Occupational – Interior Design

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<td>AutoCAD 2-D</td>
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<td>AutoDesk Inventor</td>
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<tr>
<td>Blueprint Reading for Manufacturing</td>
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<td>Manual CNC (Computerized Numerical Control) Operations</td>
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<td>MasterCAM Solids</td>
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<tr>
<td>Parametric Solid Modeling for Manufacturing</td>
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<tr>
<td>SurfCAM, 1 and 2</td>
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<tr>
<td>Technical Mathematics – Manufacturing Applications</td>
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#### Occupational – Photography & Photosographics

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<td>Applying Photos and Images in Multimedia</td>
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<td>Digital Design Systems, Introduction to</td>
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<td>Digital Image Design with Illustrator &amp; Freehand</td>
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<td>Digital Photography for the Beginner</td>
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<td>Photo Editing with Photoshop</td>
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<td>Photo Editing with Photoshop, Advanced</td>
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<td>Photographic Alternatives</td>
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#### Occupational – Service Learning

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#### Occupational – Special Needs

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#### Occupational – Stained Glass Production

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**COMMUNITY EDUCATION**

**NONCREDIT COURSE LISTINGS (continued)**

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**Section 11**
## Community Education

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### Community Education

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- Arc Welding, Beginning
- Automotive Welding, Cutting and Modification
- Certification for Welders
- Electric Arc Welding, Basic
- Fabrication and Construction Welding
- Gas Tungsten Arc Welding
- Metal Sculpture
- Oxyacetylene Welding
- Pipe and Tube Welding
- Print Reading and Computations for Welders
- Semi Automatic Arc Welding Process
- Welding, Introduction to
- Welding Metallurgy

#### Occupational – Woodworking
- Cabinetmaking/Woodworking
- Woodworking, Beginning
- Woodworking, Intermediate

#### Older Adults
- Art Fundamentals, Introduction to
- Ceramics
- Ceramics – Hand Construction
- Ceramics – Intermediate Production
- China Painting
- Chorale, Collegiate
- Chorale, Masterworks
- Concert Band
- Concert Music
- Craft Painting for Business Opportunities
- Creative Expression through Music
- Creative Writing – Fiction
- Creative Writing – Poetry
- Creative Writing (Writing your Autobiography)
- Decorative Art Production for Retail Sales, Beginning
- Decorative Art Production for Retail Sales, Intermediate
- Drawing, Beginning
- Drawing – Beginning through Advanced
- Elementary Organ
- Ensemble

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2008-09 Mt. San Antonio College Catalog
### BASIC SKILLS

**BCSK ABE01 — Adult Basic Education**
Orientation to the college including enrollment procedures, test score interpretation, course selection, and career information. Course includes Academic placement tests and/or vocational assessments available.

**BCSK ABE02 — Career Information and Guidance**
Improves basic skills of adult learners. Content includes reading comprehension, language, and mathematics. Prepares students for the General Education Development (GED) Exam and the Armed Services Vocational Aptitude Batter (ASVAB) exam.

**BCSK ABE03 — Adult Basic Education — Leadership Development**
Leadership styles and individual leadership skills including effective communication, facilitation, problem-solving, decision-making and conflict resolution. Introduction to organizational structures, governance, models and group process.

**BCSK ABE04 — Guidance and Orientation to Special Programs**
Provides an overview of special programs at Mt. San Antonio College. Information regarding the College’s mission, program guidelines, regulations, and eligibility requirements are presented.

**BCSK ABE05 — Career Development**
Career assessment, research and preparation; investigates career fields to determine interest; provides information on required skills and areas for professional growth. Includes assigned time for field investigation, individual assessment and skill building.

**BCSK ABE06 — Basic Skills Foundation**
Preparation for college credit courses; improves reading, mathematics, writing, and critical thinking by assessing current skills. Includes individual education plan to achieve career and educational goals.

**BCSK ABE07 — Re-Entry Work Skills Needed for Today’s Workforce**
Development of skills necessary for employment. Topics include workplace ethics, job search techniques, resume writing and preparing for an interview.

**BCSK CHS105 — Career/Life Planning**

**BCSK MATH01 — Developmental Mathematics — Concepts and Application**
Hands-on activities and practical applications of algebraic principles: elementary geometry, signed numbers, ratio and proportion, factoring, pre-algebra, linear and quadratic equations, complex numbers, graphing, functions, sequences, linear and non-linear inequalities and systems, progressions, and sigma notation.

**BCSK WRTR02 — Basic Writing Skills Development — Basic Skills Development in Reading and Writing**
Enhance basic skills in reading and writing, via the use of computer-assisted learning, e-mail and online tools.

**BCSK LERN01 — Basic Skills — Review**
Intensive review in the following subjects: reading, comprehension, vocabulary, grammar, basic math, pre-algebra, and algebra. Computer programs, instructional materials, and individual assistance are provided.

**BCSK LERN02 — Math Skills Review**
Increase basic math knowledge and reduce math anxiety. Topics include fractions, decimals, ratios, proportions, percents, and the application of these skills in life and work situations.

**BCSK LERN03 — Career Information and Guidance**
Preparation for college credit courses; improves reading, mathematics, writing, and critical thinking by assessing current skills. Includes individual education plan to achieve career and educational goals.

**BCSK LERN04 — Language Skills Laboratory**
Improves basic skills of adult learners. Content includes reading comprehension, language, and mathematics. Prepares students for the General Education Development (GED) Exam and the Armed Services Vocational Aptitude Batter (ASVAB) exam.

**BCSK LERN05 — Learning Support Laboratory**
Learning and workplace skills are enhanced by computer use and instruction for students enrolled in or seeking enrollment in a college instructional program.

**BCSK LERN06 — Personal Computer Applications**
Increase typing and ten-key speed using computer software. Includes current word processing, spreadsheet, database software, keyboarding techniques, including correct posture; introduction to e-mail and the Internet; time management, decision-making, problem-solving and creative thinking.

**BCSK LERN07 — Reading Acceleration**
Provides instruction and practice in techniques of reading acceleration and variable reading speeds. Students who repeat will improve reading speed and comprehension rates.

**BCSK LERN08 — Improving Writing**
Offers assistance to students who wish to improve prewriting, writing, editing and revising. Provides instruction in content and structure of sentences, paragraphs and essays; emphasizes development in writing through the integration of grammar and critical thinking.

### BASIC SKILLS — SECONDARY EDUCATION

**BCSK HSADRW — High School Expository Writing & Critical Reading**
Prepares high school students for college level reading and writing. Develops advanced proficiency in expository, analytical and argumentative writing and emphasizes the development of critical college reading skills using a variety of fiction and non-fiction texts.

**BCSK HSALG1 — High School Algebra 1**
Prepares high school students the key components of first year algebra. Variables and equations, real number operations, operations with polynomials, fractions, functions, systems of linear equations, inequalities, rational and irrational numbers, quadratic functions and problem solving.

**BCSK HSALG2 — High School Algebra 2**
Prepares high school students the key components of second year algebra. Includes basic concepts of algebra, inequalities and the proof, linear equations and functions, products and factors of polynomials, rational expressions, irrational and complex numbers, quadratic equations and functions, variation and polynomial equations, analytic geometry, exponential and logarithmic functions, sequences and series, triangle trigonometry, trigonometric graphs and identities, trigonometric applications, statistics and probability, matrices and determinants.

**BCSK HSART1 — High School Art & Creative Expression**
Artistic perception, creative expression, and aesthetic value of art for high school students. Historical and cultural influences. Original productions through design and drawing using a variety of media.

**BCSK HSART2 — High School Art 2**
Artistic perception, creative expression, and aesthetic value through experiences with art for high school students. Historical and cultural context of the visual arts. Original productions in design and drawing using a variety of media.

**BCSK HSBI01 — High School Biology**
Fundamental areas of life science for high school students. Characteristics of living things, simple organisms, plants, animals, human biology, cell biology, physiology, genetics, heredity, adaptation, evolution and ecology.

**BCSK HSCHEM — High School Chemistry**
Chemistry for high school students. Includes atomic and molecular structure, chemical bonds, conservation of matter and stoichiometry, bases and their properties, acids and bases, solutions, chemical thermodynamics, reaction rates, chemical equilibrium, organic chemistry and biochemistry and nuclear processes.

**BCSK HSCHH1 — High School Chinese 1**
Fundamentals of pronunciation and grammar, practical vocabulary; understand, read, write and speak basic Chinese. Geography, customs and culture of Chinese-speaking countries for high school students.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCSK HSCEG</td>
<td>High School English 2</td>
<td>Introduces high school students to the foundations of literature using genre and theme experiences for high school students. Exploration of oral tradition, poetry, fiction, nonfiction, drama and informational media. Vocabulary development, writing strategies and applications, reading comprehension, listening and speaking strategies, language convention, listening and speaking applications, literary response and analysis.</td>
</tr>
<tr>
<td>BCSK HSCEG</td>
<td>High School English 1</td>
<td>Introduces high school students to the foundations of literature using genre and theme experiences. Includes exploration of folk tradition, poetry, fiction, nonfiction and informational and visual media. Vocabulary development, writing strategies and applications, reading comprehension, listening and speaking strategies, language conventions, listening and speaking applications, literary response and analysis.</td>
</tr>
<tr>
<td>BCSK HSCEG</td>
<td>High School English 3</td>
<td>Introduces high school students to the terminology, problems and major philosophers from ancient to modern times. Includes the different fields of philosophy and the different systems within those fields. Emphasis will be placed on ethics and morals as they relate to students understanding and analysis of events and theories.</td>
</tr>
<tr>
<td>BCSK HSCEG</td>
<td>High School English 5</td>
<td>Introduces high school students to advanced scientific measurement and computation, the use of scientific laboratory equipment, and basic scientific writing. Addresses overall skill sets in the areas of reading, writing and note-taking as it relates to science.</td>
</tr>
<tr>
<td>BCSK HSCEG</td>
<td>High School English 4</td>
<td>Introduces high school students to advanced scientific measurement and computation, the use of scientific laboratory equipment, and basic scientific writing. Addresses overall skill sets in the areas of reading, writing and note-taking as it relates to science.</td>
</tr>
<tr>
<td>BCSK HSCEG</td>
<td>High School English 5</td>
<td>Introduces high school students to advanced scientific measurement and computation, the use of scientific laboratory equipment, and basic scientific writing. Addresses overall skill sets in the areas of reading, writing and note-taking as it relates to science.</td>
</tr>
<tr>
<td>BCSK HSCEG</td>
<td>High School English 6</td>
<td>Introduces high school students to advanced scientific measurement and computation, the use of scientific laboratory equipment, and basic scientific writing. Addresses overall skill sets in the areas of reading, writing and note-taking as it relates to science.</td>
</tr>
<tr>
<td>BCSK HSCEG</td>
<td>High School English 7</td>
<td>Introduces high school students to advanced scientific measurement and computation, the use of scientific laboratory equipment, and basic scientific writing. Addresses overall skill sets in the areas of reading, writing and note-taking as it relates to science.</td>
</tr>
<tr>
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<tr>
<td>BCSK HSPHSC</td>
<td>High School Physical Science</td>
<td>Presents to high school students an overview and introductory understanding of physical science theories and how they apply to the real world. Includes the structure of atoms, the characteristics and applications of matter, chemical reactions, motion, force, energy, work and machines, waves, sound, light and mirrors, magnetism, electricity and scientific investigation.</td>
</tr>
<tr>
<td>BCSK HSPLNG</td>
<td>High School Planning and Guidance</td>
<td>Compliments existing school guidance and planning activities and motivates high school students to utilize those resources to their best advantage. Covers the challenges faced by students at the end of high school careers.</td>
</tr>
<tr>
<td>BCSK HSPREA</td>
<td>High School Pre-Algebra</td>
<td>Designed to help high school students transition from arithmetic to algebra. Includes concepts, methods and applications of pre-algebra. Topics include operations with integers, expressions, equations, inequalities, percents, proportions, graphing, computational skills and problem-solving skills.</td>
</tr>
<tr>
<td>BCSK HSPSY</td>
<td>High School Psychology</td>
<td>Introduces high school students to the methods, facts and theories of the behavior and processes of human beings and animals. Includes theories and characteristics of the history of psychology, research and statistics, child and adult development, sensations, perceptions, cognition, motivation, behavior, personality, abnormal behavior, individuality versus group identity and behavior and therapy.</td>
</tr>
<tr>
<td>BCSK HSSK</td>
<td>High School Study Skills</td>
<td>Designed to help high school students become better learners and prepare for success in school and at work. Covers strategies and methods to enhance the students’ ability to study and learn both individually and in a group. Topics include note-taking, time management, test taking, organization, memorization, learning styles and conducting research.</td>
</tr>
<tr>
<td>BCSK HSSOC</td>
<td>High School Sociology</td>
<td>Concepts and theories of social interaction for high school students. Includes the theories, characteristics and implications of culture, socialization, society groups, deviations and control, social stratification, race, gender, age, family, education, politics, religion, sports and change.</td>
</tr>
<tr>
<td>BCSK HSSPCH</td>
<td>High School Speech and Communication</td>
<td>Designed to develop the aspects of oral communication including voice, diction, poise and ease by preparation and practice in making small speeches, and participating in discussions, debates and oral interpretation. High school students will improve their writing and speaking organization through selection and arrangement of material, through transitions and rhetorical effect.</td>
</tr>
<tr>
<td>BCSK HSSPN1</td>
<td>High School Spanish 1</td>
<td>Conversation and Writing</td>
</tr>
<tr>
<td>BCSK HSSPN2</td>
<td>High School Spanish 2</td>
<td>Designed for high school students to advance the fundamentals of pronunciation and grammar, practical vocabulary and the ability to understand, read, write and speak geography, customs, Spanish literature and culture of Spanish-speaking countries.</td>
</tr>
<tr>
<td>BCSK HSSSS</td>
<td>High School Single Survival “On Your Own”</td>
<td>Preparation for Adult Living</td>
</tr>
<tr>
<td>BCSK HSSTG</td>
<td>High School Stagecrafts</td>
<td>Aspects for high school productions and creation of theatrical support services. Set design, set painting, construction, lighting and sound design and operations. Costume and make-up application, theater design and operations. Costume and make-up application, theater services. Set design, set painting, construction, lighting and sound.</td>
</tr>
<tr>
<td>BCSK HSTAL2</td>
<td>High School Topics in Algebra 2</td>
<td>Preparation for success in high school Algebra 2. Focuses on the basic and introductory concepts, formulas and standards of Algebra 2, including solutions of linear and quadratic equations, graphing, exponential functions and the complex number system.</td>
</tr>
<tr>
<td>BCSK HSTGEO</td>
<td>High School Topics in Geometry</td>
<td>Preparation for success in high school geometry. Focuses on the basic and introductory concepts, formulas and standards of geometry, including angles, points, lines, planes, angles, reasoning skills and proofs, perpendicular and parallel lines, triangles, quadrilaterals, polygons, area and volume.</td>
</tr>
<tr>
<td>BCSK HSHSSH</td>
<td>High School United States History</td>
<td>Designed for high school students to study various themes in history in order to examine the past from pre-colonial to the modern era. Includes the examination of politics and history, the role of ideas, economics and history, and the importance of cultural development. Assessment of religion in history, the role of ideas, reasoning skills and proofs, science and technology, the environment and history and social life.</td>
</tr>
<tr>
<td>BCSK HSHWHS</td>
<td>High School World History</td>
<td>Gives high school students an understanding of humanity through the basic themes present in history: economics, politics, the roles of ideas, the importance of cultural development, religion, the roles of individuals, the impact of science and technology, geogaphical impact and cultural development. Students will also study pre-history to the modern era.</td>
</tr>
<tr>
<td>BCSK HSVEEX</td>
<td>High School Expository Writing</td>
<td>Preparation for success in expository writing for high school students. Focuses on developing essay writing including introductory paragraphs, body paragraphs and concluding paragraphs in expository, descriptive, narrative and argumentative essays.</td>
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### BASIC SKILLS – TUTORING

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<tbody>
<tr>
<td>BCSK TTR10A</td>
<td>Introduction to Tutoring</td>
<td>Introduction to tutoring, with an emphasis on tutoring strategies, problem solving, and working with a diverse student population.</td>
</tr>
<tr>
<td>BCSK TTR10B</td>
<td>Tutoring in the Language Arts</td>
<td>Permission of Tutorial Specialist recommended Tutoring in the language arts with an emphasis on approaches to working with students on written drafts and addressing the needs of non-native speakers.</td>
</tr>
<tr>
<td>BCSK TTR10C</td>
<td>Tutoring as a Supplemental Instructor</td>
<td>Tutering as a Supplemental Instructor with an emphasis on tutoring in the classroom and in small groups under the supervision of a designated instructor.</td>
</tr>
<tr>
<td>BCSK TTR10D</td>
<td>Tutoring in Mathematics</td>
<td>Tutoring in mathematics with an emphasis on strategies to promote active learning using mathematics and dealing with specific obstacles in developmental algebra.</td>
</tr>
<tr>
<td>BCSK TUTOR1</td>
<td>All Subjects Tutoring</td>
<td>Assistance in basic English and mathematics skills through tutoring and computer-based learning. Tutorial assistance in other subject areas is also available.</td>
</tr>
<tr>
<td>BCSK TUTOR2</td>
<td>Tutoring Techniques</td>
<td>Explores learning theories and tutoring techniques for tutoring individuals and small groups. Emphasis is placed on encouraging independent learning.</td>
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### CITIZENSHIP

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<tbody>
<tr>
<td>CITZ NATLZN</td>
<td>Citizenship for Naturalization</td>
<td>Intermediate and advanced students prepare for the interview for United States citizenship.</td>
</tr>
</tbody>
</table>
Community Education

**DISABLED STUDENTS**

**DSPS EDSE01 — Lifelong Learning for the Special Needs Population**
Educational activities for special needs students emphasizing physical, cognitive, social and emotional skill development.

**DSPS LERN01 — Clinical Speech Instruction**
Designed to accommodate individual and group instruction for adults with speech and/or learning problems. Includes individual evaluation and speech improvement plan. Disorders addressed include phonology, fluency, voice and resonance, hearing impairment, cerebral vascular accident and acquired brain injury. Instruction is not available for students with dialectal problems.

**DSPS LERN02 — High Tech Center Tutorial/Assistance Class**
Advisory Prerequisite: Students must be referred by a counselor in Disabled Student Programs and Services (DSP&S) in order to register for this class. Designed for students with identified disabilities who have at least three academic units at Mt. SAC. Using adaptive technology, alternate media and specialized support, offers techniques and strategies to maximize abilities in academic classes. Students are required to provide their own data disks.

**DSPS LERN03 — Adaptive Academic Preparation**
Designed for students who have been accepted into the Brain Injury Program at Mt. SAC. Includes specialized instruction and the use of computer software to improve cognitive skills (attention, memory, reasoning, etc.) needed for academic and/or vocational goals.

**ENGLISH AS A SECOND LANGUAGE**

**ESL LMG03 — English for Specific Uses (ESL)**
Advanced ESL students improve speaking, writing, vocabulary and SCANS competencies related to vocations. Includes critical thinking, customer service, teamwork and autonomous learning strategies.

**ESL LVL-1 — ESL Level 1**
Beginning to low English students build vocabulary, grammar and communication skills.

**ESL LVL-2 — ESL Level 2**
High beginning English students build upon their base of vocabulary and improve grammar understanding through practice of listening, speaking, reading and writing skills. Students work independently and in groups to develop projects and make presentations that are meaningful to them.

**ESL LVL-3 — ESL Level 3**
Low intermediate level students improve English communication and grammar through practice of listening, speaking, reading and writing skills. Activities include team projects, presentations and exams in preparation for academic/vocational success and encourage civic participation.

**ESL LVL-4 — ESL Level 4**
High intermediate level students improve English communication and grammar through practice of listening, speaking, reading and writing skills. Activities include team projects, presentations and exams, in preparation for academic/vocational success and encourage civic participation.

**ESL LVL-5 — ESL Level 5**
Low advanced level students improve English communication and grammar understanding through practice of listening, speaking, reading and writing skills. Activities include team projects, presentations and exams in preparation for and academic/vocational success and encourage civic participation.

**ESL LVL-6 — ESL Level 6**
High advanced level students improve English communication skills and prepare to transition into academic, vocational programs, or general community classes. Activities include teamwork, projects, presentations and exams to ensure life-long learning, civic participation and overall success.

**ESL PLVL-1 — ESL Pre-Level 1**
Literacy-level English students build a base of vocabulary and grammar through practice of listening, speaking and writing skills.

**ESL SPK-A — ESL Speaking A**
Beginning level students develop English listening comprehension and speaking fluency. Activities include talking in small groups or with partners, listening and responding to simple conversations, short presentations and pronunciation practice.

**ESL SPK-B — ESL Speaking B**
Intermediate level students improve English oral proficiency in areas of pronunciation, listening comprehension and speaking skills. Through group discussions and short presentations, students practice speaking with clarity and fluency, present their ideas and opinions, and make cultural comparisons.

**ESL SPK-C — ESL Speaking C**
Advanced level students expand listening and speaking strategies to facilitate academic preparation, workplace advancement and civic participation. Focus is on fluency, grammatical accuracy and appropriate social register. Activities include use of authentic material in group tasks and class presentations.

**ESL TOEFL — TOEFL Preparation**
Advanced ESL students improve grammar, speaking and writing in preparation for standardization tests such as TOEFL.

**ESL V-MLTH — English as a Second Language for Health Professionals**
Advanced ESL students improve medical vocabulary and English skills for healthcare situations.

**ESL WRTE-A — ESL Writing A**
Beginning level students develop reading and writing skills that set the foundation for their English literacy. Material is based on familiar topics and American customs. Focus is on vocabulary expansion, introduction to reading passages, and accuracy in sentence-level writing.

**ESL WRTE-B — ESL Writing B**
Intermediate level students improve English reading and writing proficiency through a variety of reading material and writing topics. Students gain fluency and confidence through abridged book reports, process writing and peer editing, primarily at the paragraph level.

**ESL WRTE-C — ESL Writing C**
Advanced level students expand English reading and writing proficiency through a range of genres. American-style process writing is practiced in order to facilitate academic preparation and workplace advancement. Focus will be on interpretation of authentic material and development of editing strategies.

**HEALTH & SAFETY**

**HLSF PE-F10 — Physical Fitness and Conditioning – Weight Training**
An over-all fitness and physical conditioning program using weight machines, free weights and Olympic lifting exercises. This course is intended for the beginner to advance exerciser. Improved results will be achieved through active participation for students who repeat the course.

**HLSF PE-I48 — Physical Fitness and Conditioning – Wrestling**
Wrestling to develop overall fitness and conditioning. Appropriate for beginning and advanced practitioners. Improved results will be achieved through active participation.

**HLSF PE-S13 — Physical Fitness and Conditioning – Football**
An increased level of physical conditioning will be attained through systematic and progressive exercises. These exercises include stretching, controlled running, muscular strength and power through weights, speed and agility developed through drills.

**HLSF PHYS01 — Water Exercise – Phase I**
Water exercise program that provides an individual workout with an emphasis on strength development, cardiovascular fitness improvement and increased flexibility. Lap swimming lanes are available. Improved results will be achieved through active participation for students who repeat the course.

**VOC RADTEC — Intravenous Therapy for Radiologic Technology**
This course prepares the Radiologic technologist student to perform venipuncture in an upper extremity to administer contrast materials under the general supervision of a licensed physician and surgeon. Principles and techniques of venipuncture will be covered including: anatomy and physiology of sites, instruments, I.V. solutions, equipment, puncture techniques, hazards, complications, emergency care, post puncture care. Procedure practice and safe competency evaluation will be performed on training aids under supervision.
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<tbody>
<tr>
<td>VOC AGLI17</td>
<td>Sheep Production</td>
<td>A study of the various types of sheep enterprises and the ways and means of entering them. Sheep management, including handling, feeding, breeding, furrowing, butchering, and marketing. Practical skills taught on the college farm.</td>
</tr>
<tr>
<td>VOC AGLI19</td>
<td>Horse Hoof Care</td>
<td>Emphasizes proper horse hoof care; shoeing, trimming and disease recognition and control.</td>
</tr>
<tr>
<td>VOC AGOR02</td>
<td>Plant Propagation/Greenhouse Management</td>
<td>Plant propagation and production practices with emphasis on florists’ plants, woody ornamentals and fruits. Commercial techniques include seed propagation, cuttings, grafting and budding, layering, fern sporing and division. Stresses greenhouses and other environmental structures for plant propagation and production.</td>
</tr>
</tbody>
</table>
Community Education

VOC AGOR04 — Park Management
Management and operation of municipal park departments. Includes the development of budgets, purchasing, park policies, planning and scheduling.

VOC AGOR05 — Park Facilities
Management and operation of different types of park facilities. Includes the management of sports fields, recreation centers, campgrounds, aquatic facilities and golf courses.

VOC AGOR13 — Landscape Design
Fundamentals and implementation of landscape design. Principles of design, the design process, drafting, graphics, site evaluation, landscaping materials, and plant usage. Projects emphasize residential and small commercial sites.

VOC AGOR15 — Interior Landscaping
Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use.

VOC AGOR24 — Integrated Pest Management
Identifies common agricultural pests in Southern California and analyzes physical, biological and chemical pest control principles and practices. Stresses use, safety, equipment, laws, and regulations of pesticides.

VOC AGOR25 — Floral Design 1
Application of principles in the art of floral design as to form, style and composition. Designing of floral arrangements, wreaths, sprays, baskets, bouquets, wedding flowers and corsages are included in the laboratory setting.

VOC AGOR26 — Floral Design 2
Continued application of principles in the art of floral design. Contemporary design theory emphasizing creativity, self-expression and professional design situations.

VOC AGOR27 — Floral Design 3
Advanced application of principles in the art of holiday designs, party and wedding designs, and sympathy designs. Florist management operations will be emphasized.

VOC AGOR29 — Ornamental Plants — Herbaceous
Identification, growth habits, culture and ornamental use of landscape annuals, biennials, perennials, ferns, indoor plants, groundcovers and vines adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR30 — Ornamental Plants – Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR32 — Landscaping and Nursery Management
Operation and management of wholesale and retail nurseries. Includes site location and layout of areas; greenhouse management; soil mixes and proper use of fertilizers, insecticides, fungicides, herbicides and growth regulators; irrigation; mechanization; financing; personnel management; retail displays, advertising and customer relationships; federal, state and local laws and regulations. Field trips are included.

VOC AGOR33 — Turf Grass Production and Management
Introduction to cultivation, maintenance and management of turf grasses utilized for athletic fields, golf courses, parks, cemeteries, commercial and residential lawns. Identification, installation, cultural requirements and maintenance practices are emphasized.

VOC AGOR34 — Sports Turf Management
Prepares students to work in the sports turf industry. Emphasizes turf cultural techniques used in sports turf management. Includes turf surfaces used on baseball, football, soccer, tennis, golf courses, driving ranges and other sports fields in both professional and amateur sports. Field trips are included.

VOC AGOR35 — Ornamental Plants — Grasses
Principles of proper soil management to optimize plant growth, including management of air, water, nutrients and organic matter. Physical and chemical properties of soil that govern soil reactions and interactions. Field trips are included.

VOC AGOR36 — Landscaping and Nursery Management
Introduction to cultivation, maintenance and management of turf grasses utilized for athletic fields, golf courses, parks, cemeteries, commercial and residential lawns. Identification, installation, cultural requirements and maintenance practices are emphasized.

VOC AGOR37 — Ornamental Plants — Grasses
Principles of proper soil management to optimize plant growth, including management of air, water, nutrients and organic matter. Physical and chemical properties of soil that govern soil reactions and interactions. Field trips are included.

VOC AGOR38 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR40 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR41 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR42 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR43 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR44 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR45 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR46 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR47 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR48 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR49 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR50 — Soil Science and Management
Principles of proper soil management to optimize plant growth, including management of air, water, nutrients and organic matter. Physical and chemical properties of soil that govern soil reactions and interactions. Field trips are included.

VOC AGOR51 — Ornamental Plants — Trees and Woody Shrubs
Identification, growth habits, culture and ornamental use of landscape trees and shrubs adapted to climates of California. Plants emphasized will come from the California Association of Nurseries and Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) certification test plant lists.

VOC AGOR52 — Hydraulics
Operation, maintenance and repair of hydraulic systems used on construction equipment. Emphasis: pumps, valves, cylinders, flow control, reservoirs, lines, motors and hydrostatic transmissions. Laboratory provides hands-on application of hydraulic systems.

VOC AGOR53 — Small Engine Repair
Principles and repair of small engines used in landscape, industrial and agricultural applications. Includes repairs of lawnmowers, chainsaws, 2-cycle engine, 4-cycle engine, spraying equipment, all-terrain vehicles, and other related gas-powered equipment.

VOC AGOR54 — Diesel Engine Repair
Principles and repair of small engines used in power industrial, landscape and agricultural equipment. Students gain actual hands-on experience maintaining, servicing and repairing diesel engines.

VOC AGOR55 — Engine Diagnostics
Analysis and evaluation of tractor power failure. Students gain actual experience in the proper diagnostic procedures of power equipment. Service, maintenance and repair of tractor electrical systems: electrical wiring, voltage regulators, generators, alternators, switches, gauges, batteries and test equipment.

VOC AGOR56 — Power Train Repair
Service, maintenance and repair of power trains. Students gain experience with clutches, transmissions, differentials, power take-off units, and final drive used to transmit power on tractors and other outdoor power equipment.

VOC AGOR57 — Landscape Irrigation – Design and Installation
Introducing, design and installation of turf and ornamental irrigation systems. Design techniques, sprinkler system components and hydraulic principles in nursery management, interior design, residential and commercial landscaping. Special emphasis is given to water conservation incorporating controlled flow technologies.

VOC AGOR58 — Landscape Irrigation – Systems Management
A systematic approach to water conservation in the landscape. Repair techniques that will allow a current system to efficiently operate to its initial design. Trouble-shooting procedures including field testing of valves and controllers. Irrigation efficiency testing will be incorporated to demonstrate proper methods of water audits and system.

VOC AGOR59 — Landscape Irrigation – Drip and Low Volume
Conservation of water in the landscape by utilization of drip and low-flow irrigation practices. Design, installation techniques, operation and maintenance of drip and low-flow irrigation systems, including determination of irrigation requirements, selection of emitters and low-flow devices, and uniformity of water distribution. Students will gain hands-on experience in design and installation techniques.

VOC AGOR60 — Landscape Construction Fundamentals
Fundamentals of construction techniques and tools used in landscaping. Students will gain skills in construction projects that include surveying techniques, utilities (gas, water, electricity), woodworking and masonry.

VOC AGOR61 — Landscape Hardscape Applications
Landscape construction pertaining to hardscape featured in the landscape. Estimation and installation of fences, walls, plants, patios, lighting, barbecues, gazebos, decks, ponds, spas, fountains and pools. Students will gain hands-on experience in the laboratory activities.
OCCUPATIONAL - ARCHITECTURAL TECHNOLOGY

VOC ARCH11 — Architectural Drawing
Basic graphic and drawing techniques, including architectural graphics, building construction fundamentals, and methods of drawings considered prerequisite to architectural design.

VOC ARCH16 — Basic CAD and Computer Application
Basic CAD (Computer Aided Design and Drafting) and computer application in architecture, engineering and related fields (including basic word processing, spreadsheet, CAD and presentation applications). Students who repeat this course will improve skills through further instruction and practice.

VOC ARCH18 — Architectural Computer Aided Design Elements
Intermediate CAD (Computer Aided Design and Drafting) specifically for architectural design and production. Portfolio of 2-D drawings and 3-D CAD models will be produced.

VOC ARCH26 — Advanced Architectural CAD Aided Design
Advanced architectural CAD drawings. Portfolio of working drawing and presentation applications of integrated 2-D and 3-D CAD models will be produced. Students who repeat this course will improve skills through further instruction and practice.

VOC ARCH28 — Architectural CAD 3-D Illustration and Animation
Intermediate to advanced architectural CAD in 3-D illustration, rendering and animation. Virtual "walk-through" and "fly-through" of interior/exteriors 3-D models with photo-realistic materials and lighting will be produced. Students who repeat this course will improve skills through further instruction and practice.

OCCUPATIONAL - BUSINESS

VOC BSA68 — Business Mathematics
Reviews addition, subtraction, multiplication, division, decimals, percentages, fractions, sign numbers, equations and problem solving.

VOC BSA70 — Payroll and Tax Accounting
Examines all areas of on-the-job payroll accounting. Surveys the various tax procedures required by the employer and employee in filing the correct forms for Social Security, federal and state income taxes and their reconciliation. Laws related to Worker's Compensation, State Disability Benefit Laws and Fair Employment Practices are discussed.

VOC BSA71 — Financial Planning
Personal financial planning for students who wish to understand their own finances or assist others in money management. Topics include income taxes, consumer credit, budgeting, home ownership, banking functions, insurance, retirement planning, investing and time value of money.

VOC BSA72 — Bookkeeping — Accounting
Fundamental bookkeeping and accounting principles including the accounting cycle for service and merchandising companies, cash management, payroll and special journals. Computerized simulations and completion of a practice set.

VOC BSA75 — Using Microcomputers in Financial Accounting
Application of basic accounting concepts utilizing ledger software program. Hands-on use of a microcomputer to process accounting transactions, prepare statements and reports, and complete accounting cycle tasks. Completion of a computerized accounting practice set will be required.

VOC BSA76 — Using Microcomputers in Managerial Accounting
Analyze financial data and prepare managerial accounting reports using Excel software. Development of "what-if" formulas to be used as an aid in decision-making. Manufacturing and consolidation worksheets, financial statement analysis, and statement of cash flows.

VOC BSM10 — Principles of Continuous Quality Improvement
History and evolution of thought in Continuous Quality Improvement, including the theories and methods of Deming, Juran and Crosby. The quality management process and tools for the continuous improvement of quality are presented. Relevant case studies are included.

VOC BSM12 — Continuous Quality Improvement Team Building
Advisory Prerequisite: VOC BSM 10
Provides comprehensive instruction in building and using Continuous Quality Improvement project teams including selection of team members and evaluation of team performance. Students completing the course will be qualified to participate as members of Continuous Quality Improvement teams, create and evaluate problem solutions applying tools for improvement planning and team decision making, and build an effective improvement plan.
### VOC BSM20 — Principles of Business
Overview of business and its functions, background, development, organization and opportunities. Business terms, current trends, methods, contemporary and future problems, and current business practices are covered.

### VOC BSM25 — Principles of E-Commerce
A hands-on course focusing on learning the principles of e-commerce through the use of the internet. Students study the economic importance of e-commerce domestically and internationally. Includes use of the internet, consumer buying, retail and business purchases, internet marketing, digital advertising, global e-commerce and business websites.

### VOC BSM51 — Principles of International Business
An overview of the rapidly changing international business environment, designed to provide a global perspective. Introduces global viewpoints across the full spectrum of business functions, including but not limited to: accounting, finance, human resources, management, operations, production, purchasing and strategic planning.

### VOC BSM52 — Principles of Exporting and Importing
Acquaints the student with the vocabulary, acronyms and the basic information needed for an understanding of and participating in the exporting and importing of goods and services.

### VOC BSM60 — Human Relations in Business
Behavior, personality, self-management, self-development, and elementary business psychology as an aid to furthering the student's business advancement and lifelong learning. Class discussions focus on the student's understanding of intrapersonal and interpersonal effectiveness with emphasis on communications, motivation, leadership and other related areas.

### VOC BSM61 — Business Organization and Management
Functions of management, techniques of decision making and problem solving, and methods used by the manager to achieve organizational goals. Various theories of management, lines of authority, functions of departments, and the importance of policies, procedures, and controls are discussed.

### VOC BSM62 — Human Resource Management
Direction of people including guidance, control, supervisory problems, training, job analysis, interviewing, testing, rating and other functions involving human resources. Designed to improve the overall understanding of the relationship between the individual and the business organization.

### VOC BSM66 — Small Business Management
Practical problems encountered in organizing and operating a small business enterprise: initiating the business, financial and administrative control, legal and government relationships and other related considerations.

### VOC BSM85 — Special Issues in Business
Provide business majors with a forum to gain knowledge, develop techniques, problem solve and implement an actual business plan. Special emphasis will be placed on the particular project of the actual business used as the class project.

### VOC BSO05 — Business English
Skills and techniques of English, as applied to business situations. Emphasis on effective paragraphs and memos.

### VOC BSO25 — Business Communications
Written communications including letters and memos meeting a variety of situations in the business environment. Includes writing of good news, bad news, sales, claims and persuasive correspondence; letters and resumes appropriate to job seeking and application; and practicing oral skills as applied to job interviews and business reports.

### VOC BSO26 — Oral Communications for Business
Designed to help business people communicate more effectively in spoken communication situations such as training sessions, presentations, and professional discussions.

### VOC BSO25 — Business Communications
Spelling and Vocabulary for Success
Advisory Prerequisite: VOC BSO05
Learn to spell and define troublesome words. Improve basic spelling and vocabulary used by business and industry. Includes proper use of dictionary; word division; adding suffixes and prefixes; synonyms; computer-related vocabulary; and business vocabulary.

### VOC BSO69 — Business Vocabulary
Develops a broad word command of new and specialized business vocabulary for use in various businesses. Improves vocabulary to enhance written and oral communication.

### VOC BSS50 — Retail Store Management and Merchandising
Principles and practices used in the management and merchandising of retail stores. Includes all aspects of the critical buying function, merchandising, promotional techniques, site selection, layout, staffing, market positioning and customer service.

### VOC BSS70 — International Marketing Concepts
Factors unique to foreign economics, cultural environments, political/legal problems, marketing intelligence procedures, international product policy, distribution and market channels, promotion and pricing decisions.

### VOC BSS85 — Special Issues in Marketing
Provides marketing majors with a forum to gain knowledge, develop techniques, problem-solve and implement an actual business marketing plan. Special emphasis will be placed on the particular project of the actual business used as the class project.

### VOC CISB15 — Microcomputer Applications
Introduction of windows based operating system and applications. Simple business examples using up-to-date browsers, word processing, spreadsheet, database management and presentation software; and integration of software applications. Hands-on instruction on windows based computers.

### VOC CP01 — Computer Keyboarding
Basic alpha/numeric keyboarding skills on a personal computer; develops a straight-copy rate of 25 to 40 gross words a minute with a predetermined error limit.

### VOC CP01A — Computer Keyboarding
Develops basic alpha/numeric keyboarding with skills on a personal computer; develops a straight-copy rate of 25 to 30 gross words a minute with a predetermined error limit.

### VOC CP01B — Computer Keyboarding
Develops alpha/numeric keyboarding skills on a personal computer; develops a straight-copy rate of 25 to 40 gross words a minute with a predetermined error limit.

### VOC CP01BL — Computer Keyboarding Laboratory
A lab study program designed to complement the lecture materials presented in computer program instructional courses.

### VOC CP01AAL — Computer Keyboarding Laboratory
A lab study program designed to complement the lecture materials presented in computer program instructional courses.

### VOC CP01B — Computer Keyboarding
Develops alpha/numeric keyboarding with skills on a personal computer; develops a straight-copy rate of 25 to 30 gross words a minute with a predetermined error limit.

### VOC CP01B — Computer Keyboarding
Develops alpha/numeric keyboarding with skills on a personal computer; develops a straight-copy rate of 25 to 30 gross words a minute with a predetermined error limit.

### VOC CP01B — Computer Keyboarding
Develops alpha/numeric keyboarding with skills on a personal computer; develops a straight-copy rate of 25 to 30 gross words a minute with a predetermined error limit.
VOC CP02 — Intermediate Computer Keyboarding
Develops computer keyboarding speed and accuracy with a proficiency standard upon completion of 35-55 gross words a minute with a predetermined error limit. Using word processing software, extensive instruction given for formatting of letters, memos, reports, tables and other related business documents.

VOC CP10 — Operating the Macintosh Computer
Basic skills and in-depth practice operating the Apple Macintosh computer. Includes introduction to the operating system, paint, draw, word-processing, database, spreadsheet, and multi-media applications.

VOC CP11 — Internet Research for Business
Practical hands-on instruction using the Internet for research in a business environment. Master Internet-specific research techniques, discover timesaving tips for locating and managing information, and use the entire Internet, newsgroups, FTP (File Transfer Protocol) and mailing lists.

VOC CP12 — Office Computer Applications
Overview of computer applications utilized in the office environment. Includes extensive hands-on instruction in word processing, spreadsheet, data management, and business graphics. Intended for the student who needs to upgrade or acquire office computer skills.

VOC CP13 — Using Web Page Software
Using industry leading web page authoring software to plan, develop, and publish effective professional websites. Includes working with text and graphics; creating hyperlinks; creating tables and layers; collecting data with forms; adding multimedia objects; creating and applying cascading style sheets; creating interactions and behaviors; publishing a website.

VOC CP150 — Basic PowerPoint
Overview and basic instruction given for formatting of letters, memos, reports, tables and other related business documents.

VOC CP16 — Data Entry
Data entry using a microcomputer. Includes intensive skill building on the ten-key pad and development of keyboarding skills for entering formatted and non-formatted text, both alphabetic and numeric, in a variety of business applications.

VOC CP20 — Word for Office / Business Professionals
Extensive hands-on instruction using Microsoft Word and its language, editing and formatting tools to create, revise and format various business and report documents. Also create complex publication documents using advanced formatting techniques and tools.

VOC CP28 — Office Management Skills
Training and skill building in filing systems and procedures, proofreading, telephone techniques, faxing, emailing and electronic calendaring of events, appointments and meetings.

VOC CP29 — Computer Keyboard Skills Building
Using microcomputers to increase speed and accuracy through intensive drills. Students will have their keyboarding skill diagnosed and appropriate drill work will be prescribed. Students who repeat this course will improve skills through further instruction and practice.

VOC CP50 — Desktop Presentations using PowerPoint
Use PowerPoint to plan, design, and produce effective presentations. Includes creating charts, diagrams, and storyboards; developing appropriate text content; adding sound, animation, and movies. Students who repeat this course will improve skills through further instruction and practice.

VOC CP60 — Desktop Publishing with InDesign or Pagemaker
Using Pagemaker or InDesign publishing software to integrate text and graphics for designing, editing and producing high-quality business publications.

VOC CP62 — Desktop Publishing with QuarkXpress
Using QuarkXpress desktop publishing software on a microcomputer to integrate text and graphics for designing, editing and producing high-quality business publications.

VOC CP66 — Desktop Publishing Seminar
Produce publishing products emphasizing creative design and effective production. Practical experience through working with clients and working in teams.

VOC CP69 — Modifying Images for Desktop Publishing
Using Adobe Photoshop on a microcomputer as applied from the page layout or presentation program.

VOC CP70 — Typing Skills
A hands-on course focusing on ways to create documents in applications such as Microsoft Word; includes basic computer maintenance and problem-solving techniques.

VOC CPBC2 — Basic Computing Level 2
A hands-on course focusing on ways to create documents in applications such as Microsoft Word; includes basic computer maintenance and problem-solving techniques.

Note: Students may take this class only 2 times consecutively.
Registration is first-come, first-served. Students must register in person, and may register for only one class per site.

VOC CPBC3 — Basic Computing Level 3
Prerequisite: VOC CP-BC2 Basic Computing Level 2
Designed to increase word processing skills through creative projects which introduce computer graphics. Students will further their understanding of proper computer care and maintenance.

VOC CPCC — Creative Computing
Develops creative skills in utilizing graphic designs for projects such as business cards, letterhead, labels, flyers, posters, greeting cards and computer-generated fabric designs. Proper marketing skills will also be discussed.

VOC CPCL — Computer Laboratory
A lab study program designed to complement the lecture materials presented in computer program instructional courses.

VOC CPNET — Introduction to Internet Research
Includes e-mail, research, terminology and functional capabilities of the Internet.

Note: Registration is first-come, first-served. Students must register in person and may register for only one class per site.

VOC CNET50 — PC Servicing
Current operating systems required for A+ and Network+ Certification and general computer servicing. Topics include: identification of major components, installation, configuration, upgrading and troubleshooting.

VOC CNET52 — Operating Systems
Current operating systems required for A+ and Network+ Certification and general computer servicing. Topics include: identification of major components, installation, configuration, upgrading and troubleshooting.

VOC CNET54 — PC Troubleshooting
Advanced microcomputer servicing. Includes: isolating, identifying, and repairing specific problems in the computer environment at the hardware level. Prepares students for the A+ Certification Exam.

VOC CNET56 — Home Theater, Home Integration and Home Security Systems
Home theater, home integration, and other home management systems. Emphasis on home theater, home management PECs, security hardware and programming and the installation and servicing of such systems. Prepares the student for the California State Contractors C-7 voltage systems license.
Community Education

VOC CNET60 — A+ Certification Preparation
Prepares the student and qualified computer technician for the A+ certification examination. All aspects of the Core and OS test modules will be stressed through both lecture review and test simulation software.

VOC CNET62 — Network+ Certification Preparation
Prepares the student and/or A+ certified technician for the Network+ Certification Examination. Individuals preparing for a job in the computer networking industry or who wish to become Network+ certified will find this course invaluable.

OCCUPATIONAL – CORRECTIONAL SCIENCE

VOC CORS10 — Introduction to Correctional Science
Overview of the field of corrections: county jail, probation, the California Youth Authority and the Department of Corrections as a member of the Criminal Justice System. Includes philosophy, past and the present practices and the criminal justice and correctional processes.

VOC CORS15 — Control and Supervision of the Offender
Examines methods of controlling and supervising inmates. Emphasizes California's methods in expanding institutions.

VOC CORS20 — Correctional Law
Legal and due process rights for inmates. Inmate rights vs. needs of society. State, Federal and appellate court decisions.

VOC CORS25 — Probation and Parole
Historical development of probation and parole with emphasis on current California programs. Defines the roles of courts, parole boards and the duties and responsibilities of the staff of probation and parole agencies.

VOC CORS30 — Ethnic Relations in Corrections
A historical survey of minority roles, problems and relationships in America. Stresses cultural and racial differences and interpersonal relationships of correctional staff and clients.

VOC CORS35 — Interviewing and Counseling in Corrections
Techniques of interviewing and counseling in the field of corrections with emphasis on practical application. Needs of the client and agency will be stressed.

VOC CORS40 — Crime and Delinquency
Criminal behavior and types of crime and effects on society and victims. Stresses property crime, property offender, motivation and methods of control used by society.

VOC CORS45 — The Violent Offender
Violent crimes of felony assault, robbery, rape, the various types of homicide, and the characteristics of both the offender and the victim.

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VOC CORS50 — Introduction to Mechatronics
An introduction to the field of mechatronics, a combination of conventional electronic technology with mechanical and computer technology. Special emphasis is on robotics. Hands-on activities include the building of a robot.

VOC CORS51 — Technical Applications in Microcomputers
Use of the personal computer (PC) in electronics for technically related applications. Includes word processing, spreadsheet, database, computer presentation methods, e-mail and job searches. Students who repeat this course will improve skills through further instruction and practice.

VOC CORS52 — Computer Simulation and Troubleshooting
Use of the personal computer for simulation and troubleshooting of both analog and digital electronic circuits. Circuit analysis, value substitution, and fault diagnostics will be done with the emphasis on "Electronics Workbench/Multisim" software. Students who repeat this course will improve skills through further instruction and practice.

VOC CORS53 — Electronics Theory
Corequisite: VOC CORS50
DC circuit theory covering resistive circuits, basic components, Ohm's Law, Kirchoff's Law, and network theorems. (Students seeking a survey course in electronics could take ELEC 90, Survey of Electronics, rather than ELEC 50A or 50B.)

VOC CORS54 — Electronics Laboratory
Corequisite: VOC CORS50
Laboratory experiments in DC circuitry covering concepts presented in VOC CORS50A. Emphasizes safety, breadboarding skills, data collection and reporting, and test equipment.

VOC CORS55 — Microwave Communications Lecture
Analog and digital communication circuits theory. Emphasizes analog and digital modulation principles in AM, FM, SSB, PLL, FDM, TDM, moderns, fiber optics, and telecommunications circuits.

VOC CORS56 — Microwave Communications Laboratory
Laboratory experiments in communication circuits covering concepts presented in ELEC 55. Emphasis is on proper use of test equipment, test procedures, breadboarding, and analysis in both analog and digital modulation circuits.

VOC CORS60 — A+ Certification Preparation
Prepares the student and qualified computer technician for the Network+ Certification Preparation. All aspects of the Core and OS test modules will be stressed through both lecture review and test simulation software.

VOC CORS62 — Network+ Certification Preparation
Prepares the student and/or A+ certified technician for the Network+ Certification Examination. Individuals preparing for a job in the computer networking industry or who wish to become Network+ certified will find this course invaluable.

VOC CORS65 — Microwave Communications
Laboratory experiments in microwave communication circuits covering concepts presented in ELEC 55. Emphasizes data collection and reporting, measurement techniques, and test equipment.
VOC EL65A — Mathematics of Electronics – DC
Mathematics of DC circuits analyzing passive circuits including Ohm’s Law, Kirchoff’s Law, voltage dividers, current dividers, and network theorems.

VOC EL65B — Mathematics of Electronics – AC
Mathematics of AC circuits analyzing passive circuits including resistance, reactance, impedance, resonance, and complex numbers (polar and rectangular).

VOC TCH60 — Customer Relations for the Technician
Customer relations (soft skills) for the technician, including benefits of knowing and using effective customer contact tools, proper customer interactions, ethics and maintaining customer satisfaction.

VOC EST50 — Electrical Fundamentals for Cable Installations
Electrical fundamentals for cable and wire installations and other low voltage systems. Includes DC/AC, solid-state devices, digital and microprocessor devices and their application to cable installations. Prepares students for the California State Contractors C-7 low voltage systems license.

VOC EST52 — Fabrication Techniques for Cable Installation
Fabrication techniques used in the installation of home theater, computer networks, home automation, and other low voltage system applications. Emphasis on hand and power tools, construction methods and materials as they apply to cable and wire installations.

VOC EST54 — Cabling and Wiring Standards
Cable and wire standards of video, voice and data wiring for home theater, computer networks, home automation, and other low voltage system applications. Emphasis on hand and power tools, construction methods and materials as they apply to cable and wire installations.

VOC EST56 — Home Theater, Home Integration & Security Systems
Home theater, home integration, and other home management systems. Emphasis on home theater, home management PLCs, security hardware and programming and the installation and servicing of such systems. Prepares students for the California State Contractors C-7 low voltage systems license.

VOC EST64 — Electronic Troubleshooting 2
Troubleshooting advanced electronic video circuits and systems to component level. Includes digital TV and HDTV (plasma, LCD, DLP).

VOC EST65 — Home Theater, Home Integration & Security Systems
Home theater, home integration, and other home management systems. Emphasis on home theater, home management PLCs, security hardware and programming and the installation and servicing of such systems. Prepares students for the California State Contractors C-7 low voltage systems license.

VOC EST66 — Electronic Troubleshooting 1
Troubleshooting basic electronic circuits and systems to component level. Circuits include: power supplies, amplifiers, audio circuits, home theater audio (Dolby 5.1) and video circuits (analog TV).

VOC EST69 — Low Voltage Systems Design and Troubleshooting
Low voltage systems. Prepares students for the California State Contractors C-7 low voltage systems license.

VOC EDT11 — Technical Engineering Drawing 1
Basic skills for a solid foundation in the Engineering Drawing or Computer-Aided Design fields. Involves application, basic sketch, theories and design processes used in engineering and industrial drawings. Completion of a portfolio is a requirement of this course.

VOC EDT14 — Mechanical Design – Geometric Dimensioning and Tolerancing
Use symbols for tolerance of form and tolerance of position and drawing requirements with respect to actual function and relationship of part features. Studies of related terminology, power transmission, bearing and mechanical devices, related exercises including design layout, details and assembly drawings. Completion of a portfolio is a requirement of this course.

VOC EDT16 — Basic CAD and Computer Applications
Basic CAD (Computer Aided Design and Drafting) and computer application in architecture, engineering and related fields (including basic word processing, spreadsheet, CAD and presentation applications). Students who repeat this course will improve skills through further instruction and practice.

VOC EDT18 — Engineering CAD 3-D Solids and Surfaces
Intermediate CAD for engineering, explores the 2-D and 3-D environments, 3-D parametric solid modeling, file manipulation related to Windows platforms.

VOC EDT24 — Engineering CAD 3-D Solids and Surfaces
Advanced engineering CAD for developing detailed working drawings in 3-D environments, incorporating 3-D parametric solid modeling, bill of materials, and surface development. Students who repeat this course will improve proficiency and skill levels.
Community Education

VOC EDIT26 — Civil Engineering Technology and CAD
Theory of civil engineering projects with hands-on instruction in civil drawings and Computer Aided Drafting and Design (CAD) applications. Layout, topography maps, grading plans, sections, street improvements, and interpretation of surveyor’s data are covered. Set of CAD drawings produced for a final portfolio.

OCCUPATIONAL – FASHION

VOC FASH08 — Introduction to Fashion
Examines scope of the fashion industry from concept to consumer: Industry background and technology. Includes design, manufacturing, distribution, sales and promotion with emphasis on career opportunities and qualifications.

VOC FASH10 — Clothing Fundamentals
Development of a basic understanding of industry standard apparel construction techniques using a variety of machines and equipment. Included are marker preparation, commercial patterns, basic block fusing, and garment construction of slim skirt/pants, dress/shirt, and knit "T" shirt.

VOC FASH12 — Advanced Clothing
Industry-quick alternatives to traditional construction and tailoring techniques, using overlock and single needle machines. Hands-on experience using woven fabrics for tailored clothing and novelty knits.

VOC FASH15 — Fashion Strategies
An investigative overview of sociological, psychological, cultural and fashion industry influences on clothing selection. The elements and principles of design and their impact on dress will be explored.

VOC FASH20 — Illustration for Fashion and Costume Design
Drawing techniques for fashion and theatrical costume design. Application of the basic techniques used in drawing a well-proportioned male and female figure and in rendering garment flats using texture, fabric and design detail. Students will explore a variety of mediums.

VOC FASH21 — Basic Patternmaking
Theory and application of basic flat patternmaking techniques to create garment designs using industry standards. By means of dart and seam manipulation, slopers will be created, constructed and fitted.

VOC FASH22 — Fashion Design by Draping
Three-dimensional dress design through draping fabrics directly to a dress form to create original designs or to interpret fashion illustrations.

VOC FASH23 — Patternmaking 2
Intermediate pattern drafting and flat patternmaking, with the introduction to the sizing of patterns/grading. Development of patternmaking skills to include two-way stretch knits, swimwear, and complex construction. Students apply commercial manufacturing standards in producing size ranges for misses’ and women’s wear; to include skirts, pants, bodices, sleeves and collars.

VOC FASH24 — Fashion Patternmaking by Computer
Applications of Computer Aided Design (CAD) patternmaking and grading for the fashion industry. Exploration of drafting techniques, pattern development, flat pattern manipulation and the sizing/grading of patterns.

VOC FASH25 — Fashion Computer-Assisted Drawing
Drawing production flats, colorization and scanning images using computer as a drafting tool. Exploration of popular computer techniques and methods suitable for use in apparel industry. Concentration on Adobe Illustrator and Adobe Photoshop.

VOC FASH30 — Fashion Design and Product Development 1
Overview of the global environment for product development for fashion. Applies the concepts and methods by which retailers create special store-branded merchandise for targeted customer segments. Students will develop financial and design goals, create product concept and line boards, and evaluate the aesthetic and commercial results.

VOC FASH31 — Fashion Design and Product Development 2
Intermediate fashion students will create and maintain a personal design sketchbook and work with the basic categories of swim wear, active wear, children’s and junior clothing. Industrial techniques of drawing production flats and design room sketches are taught in addition to the full fashion figure. Projects will include creation of lines including production flats, textile selection, cost sheets, full-color illustrations and full scale patterns.

VOC FASH32 — Fashion Design and Product Development 3
Advanced fashion design and product development emphasizing in portfolio format, a minimum of three lines with production flats, scale patterns, pattern charts, cost sheets and sample garments. A design sketchbook will be maintained. Includes resume preparation and job search appropriate for the fashion design industry.

VOC FASH62 — Retail Store Management and Merchandising
Principles and practices used in the management and merchandising of retail stores. Includes all aspects of the critical buying function, merchandising, promotional techniques, site selection, layout, staffing, market positioning and customer service.

VOC GEOG10 — Introduction to Geographic Information Systems
An introduction to the fundamentals of a geographic information system (GIS), including history of automated mapping; introduction to cartographic principles; overview of software, such as ArcView; hardware; application of GIS technology in environmental sciences, government, business, terminology, data, and spatial analysis.

VOC HLTH01 — Certified Nursing Assistant
Prepares participant to work in a skilled nursing facility and pass California Long-Term Care CNA exam. Prerequisites:
• Current American Heart Association BLS for Health Care Providers card (must be valid for course duration)
• Completed Technology and Health Division Student Medical History card (must be valid for course duration)
• Social Security card
Co-requisite: Enrollment in VOC HLTH 05

VOC HLTH04 — Acute Care Nursing Assistant
This course will enhance the existing skills of the CNA and provide the knowledge and job skills to work in various departments of acute care hospitals including med-surgical, obstetrics and pediatrics. Prerequisites:
• Current American Heart Association BLS for Health Care Providers card (must be valid for course duration)
• Completed Technology and Health Division Student Medical History and Physical exam form within the last 3 months
• Current Live scan fingerprint documentation.
• Valid identification (CA driver’s license or CA ID card) and Social Security card

VOC HLTH05 — Live Scan Fingerprinting
This course will provide background on the California Live Scan Fingerprinting Program. Prerequisites:
• Current American Heart Association BLS for Health Care Providers card (must be valid for course duration)
• Completed Technology and Health Division Student Medical History and Physical exam form within the last 3 months
• Current Live scan fingerprint documentation.
• Valid identification (CA driver’s license or CA ID card) and Social Security card
• Current Live scan fingerprint documentation.

VOC CPR01 — BLS Heartsaver Course – Adult
This three (3) hour course is designed to teach the life-saving skills of cardiopulmonary resuscitation, the first aid techniques for choking emergencies, and how to respond to general life-threatening emergency situations. Students will learn about the risk factors associated with heart attacks and strokes. Successful completion of the course will provide the student with an American Heart Association Heartsaver CPR Level A Completion Card, renewable in two years.

VOC ANAT50 — Basic Anatomy and Physiology
Introduction to human anatomy and physiology by systems, with brief descriptions of biochemistry, cell biology and molecular biology. Upon completion, students will understand normal functions and be able to recognize pathologies.
VOC HLTH05 — Health Careers Resource Center
Provides health occupational students with instructional media and equipment to practice and improve nursing and other health occupation competencies.

VOC HLTH12 — Medical Terminology
Presents a study of the use and meaning of basic medical terminology. A programmed learning, word building system will be used to learn word parts that are used to construct or analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. Abbreviations will be introduced as related terms are presented. Special emphasis will be placed on actual case diagnoses, treatments and medical interventions.

VOC HLTH13 — Interpreting in Health Care 1
Skills necessary for effective language interpretation in health care settings; emphasis on the roles and responsibilities of a health care interpreter, basic knowledge of common medical conditions, treatments and procedures, insight in language and cultural nuances for specific interpretation.

VOC HLTH14 — Interpreting in Health Care 2
Further enhancement of interpreting skills learned in VOC HLTH13 covering specialized health care service areas such as genetics, mental health, and death and dying. Emphasis on the development of cultural competency in the community and workplace and careers in interpretation.

VOC HLTH15 — Externship in Health Care Interpreting
Corequisite: VOC HLTH20
Healthcare Interpreting Seminar Facilitating linguistic and cultural communication between client and health care providers.

VOC HLTH16 — Geriatric Resource Specialist
Prepares the participant to utilize available resources for older adults on a national and local basis. Identification of older adults’ needs; development of action plans to access appropriate services.

VOC HLTH18 — In-Home Care of Alzheimer’s and Dementia Clients
Information and educational activities with techniques to enhance one’s ability to work with Alzheimer’s/Dementia consumers, with an emphasis on effective communication skills and appropriate activities when working with consumers and delivering direct care.

VOC HLTH20 — Health Care Interpreter Seminar
Principles, issues, concepts, and skills related to the role of the Health Care Interpreter in facilitating linguistic and cultural communications through the externship field experience. Hotel and Restaurant Management

VOC HRM51 — Introduction to Hospitality
Brief review of the historical development of the hospitality industry; social and economic influences on the current leisure industry structures. Career opportunities at various levels in hotels, restaurants, food service institutions and private clubs/resorts. Education and experience requirements, personal qualifications, job responsibilities, job procurement and future opportunities.

VOC HRM52 — Food Safety/Sanitation
Basic principles of sanitation and safety in the food service industry. Emphasis on the role of management in design, implementation and training to establish an effective Hazard Analysis Critical Control point (HACCP) system. (Recommend concurrent enrollment in ID 105.)

VOC HRM53 — Dining Room Service Management
Skills and knowledge needed for all aspects of dining room service. Exploration of the five different service styles and their relationship to various environments. Table setting styles, buffet setup, wine and beverage service, and service as a sales tool are covered. Safety of both customer and staff are discussed.

VOC HRM54 — Commercial Food Preparation
Basic principles of preparing foods for commercial operations; the use and identification of commercial tools and equipment; extending recipes; choosing the proper food grade; evaluation of food products and equipment usage.

VOC HRM55 — Food Service Management
Management skills course for students pursuing a career in supervision in the management of operations and human resources in restaurant and hospitality businesses including analysis of hospitality workplace; the manager’s responsibilities in training, coaching and performance appraisal of employees; decision making, leadership and planning.

VOC HRM56 — Management of Hospitality Personnel and Operations
Management skills course for students pursuing a career in supervision in the hospitality business. Emphasis is on tailoring the Uniform System of Accounting to maximize profits without compromising products. Discusses controls in front of the house, back of the house, purchasing and receiving.

VOC HRM57 — Restaurant Cost Control
Basic principles of managing a fast food operation. Comparison with conventional restaurants in pricing, labor needs and facilities. Developing and marketing a positive company image. Practical and legal aspects of franchising versus single ownership. Sanitation and cost controls.

VOC HRM58 — Fast Food Service Management
Basic principles of managing a fast food operation. Comparison with conventional restaurants in pricing, labor needs and facilities. Developing and marketing a positive company image. Practical and legal aspects of franchising versus single ownership. Sanitation and cost controls.

VOC HRM60 — Purchasing for the Restaurant Industry
Basic principles of purchasing for the food service industry. Ordering, receiving, storage, characteristics of products and grade selection for different situations are emphasized. Choosing the best supplier, negotiating the best terms and writing product specifications are covered.

VOC HRM61 — Menu Planning
Menu development for all facets of the food service industry including retail and contract operations; emphasis on the economics of the menu with regard to limitations of the facility and staff, pricing and menu design relative to the economy and culture of the target area. Specialty menus such as ethnic, fast food, catering and various contract situations are included.

VOC HRM62 — Catering
Comprehensive exploration of the catering business with in-depth study of organizing and creating both on-premise and off-premise events. Marketing and working with clients to combine menu with price. Contracting outside vendors, problem solving and avoiding common problems before they occur.

VOC HRM64 — Hospitality Financial Accounting
Introduction to financial accounting specifically for the hospitality business. Emphasis is on tailoring the Uniform System of Accounting to hotels, restaurants, clubs and other food service operations.

VOC HRM66 — Hospitality Law
Basic principles of contracts, liability and labor as they apply specifically to the hospitality industry. Students will discuss previous cases and decide the fate of fictional litigations as a preventive approach to problems that can occur.

VOC HRM70 — Introduction to Lodging
Introduction to the basics of the lodging industry. Acquaints students with front office operations, accounting, guest service, housekeeping and food service. Includes human resource management and property management. Enrollment in Work Experience in Restaurant/Food Service (RSTR 91, 92, 93 or 94) is needed for articulation to California Polytechnic State University.

VOC ID100 — Fundamentals of Interior Design
Application of design principles and elements in planning of total interior environments that meet individual, functional, legal and environmental needs. Selection of all materials and products used in interior environments will be emphasized for the functional aesthetic quality. (Recommend concurrent enrollment in ID 105.)

VOC ID105 — Manufacturing Technology

COMMUNITY EDUCATION
COMMUNITY EDUCATION

OCCUPATIONAL – MANUFACTURING TECHNOLOGY

VOC MF61 — Manufacturing Processes 1
Manual and computerized manufacturing, manual lathes and mills, tool nomenclature and Computerized Numerical Control (CNC) operations. Operation of CNC machines. Students who repeat this course will improve skills through further instruction and practice.

VOC MF62 — Manufacturing Processes 2
The study of manufacturing equipment and manufacturing processes. Theory and practice in milling operations, tooling setup, metallurgy, heat treatment, precision grinding, and basic tool design.

VOC MF65 — AutoCAD 2D
Development of two dimensional AutoCAD mechanical screen drawings, as related to Computer Integrated Manufacturing (CIM), and Computer Aided Machines (CAM). Completed drawings will be translated into DXF and/or IGES files and then transferred to various CAD/CAM systems.

VOC MF67 — 3-D CAD for Mechanical Modeling
Advisory Prerequisite: VOC CIM 15 or equivalent industrial experience. Development of three dimensional mechanical models using AutoCAD. Includes interaction with Computer Aided Machines (CAM) and Computer Integrated Manufacturing (CIM). Analysis and manipulation of mechanical solid models and industrial primitives as related to their interactions with CAM and CIM systems.

VOC MF69 — Parametric Solid Modeling for Manufacturing
Development of feature-based solid modeling on a computer using current industry software. Transfer of solid model to a CAM system for CNC code production. Includes production of a manufactured part using CNC mill.

VOC MF6B — Advanced Parametric Solid Modeling for Desktop
Advanced instruction in concepts, practice, and development of feature-based solid modeling using Autodesk Mechanical Desktop. Advanced features of solid modeling: global variables, 3-D helical paths generation, surface cut, table-driven parts, and advanced scene and assembly techniques. Students who repeat this course will improve skills by further instruction and practice.

VOC MF67 — AutoDesk Inventor
Advanced concepts, practice, and development of feature-based solid modeling using AutoDesk Inventor. Solid modeling parts creation using sketched, placed, and work features. Assembly techniques, working drawings, and the transfer of a solid model to a CAM system.

VOC MF68 — MasterCAM 1
Use MasterCAM software to create wire-frame part geometry, add tool paths, and create CNC code for CNC mills and CNC lathes. Students who repeat this course will improve skills through further instruction and practice.

VOC MF68B — Advanced MasterCAM
Use MasterCAM software to create wire-frame 3D/multi-axis part geometry, add tool paths, and create CNC code for CNC mills and CNC lathes. Students who repeat this course will improve skills through further instruction and practice.

VOC MF68C — MasterCAM Solids
Using MasterCAM software to design wire drawings, translate to solids drawings, and generate code from a solids creation to meet industrial standards. Students who repeat this course will improve skills through further instruction and practice.

VOC MF69 — SurfCAM 1
SurfCAM software used to create part geometry from project drawings for two-axis milling and turning parts. Tool paths will be added and files completed and post-processed. Files will be downloaded to CNC machines. Students will be required to set up all cutting tools and machine the part. Students who repeat this course will improve their skills through further instruction and practice.

VOC MF69B — SurfCAM 2
SurfCAM software used to create part geometry for three-axis milling and lathe parts from project drawings and CAD files. Tool paths will be added and the completed file will be post-processed and downloaded to CNC machine. Students will set up the required cutting tools and machine the part. Students who repeat this course will improve skills through further instruction and practice.

VOC MF69C — SurfCAM 3
SurfCAM software used to create part geometry for four-axis simulation and vertical machining. Tool paths will be added and the completed file will be post-processed and downloaded to CNC machine. Students will set up the required cutting tools and machine the part. Students who repeat this course will improve skills through further instruction and practice.

VOC MF68 — Blueprint Reading for Manufacturing
Blueprint reading as a means of interpreting and visualizing drawings used in manufacturing. Includes the basic print form, title block, notes, materials, machining specifications, application of principles to CNC, welding, and sheet metal. Students who repeat this course will improve skills through further instruction and practice.

VOC MF68 — Technical Mathematics – Manufacturing Applications
Applications of mathematical principles in manufacturing. Includes arithmetic calculations, measurement, use of formulas, geometry, and trigonometry. Students who repeat this course will improve skills through further instruction and practice.

VOC MF68 — Manual CNC (Computerized Numerical Control)
Theory and practice in manually developing CNC programs. Methods of transmitting data to CNC machines and physical set-up and operations of CNC equipment. Students who repeat this course will improve skills through further instruction and practice.

VOC MF68 — Cooking for your Heart and Health
Skills in healthful food preparation emphasizing foods low in fat, cholesterol and sodium, and high in fiber and nutrients.

VOC NF42 — Vegetarian Cuisine
Investigates nutritional issues related to vegetarian eating practices. Includes laboratory experience in preparation of vegetarian foods and meals.

OCCUPATIONAL – PHOTOGRAPHICS & PHOTOGRAPHY

VOC CP-DI — Digital Photography for the Beginner
Operation of digital cameras, image management and composition, development of research skills using the Internet, and imaging graphics software. A hands-on course which includes scheduled field trips.

VOC GRP01 — Computer Graphics Laboratory
Provides computer laboratory experience to supplement the regular program, and provides opportunities for students to pursue more advanced projects. Students who repeat this course will improve skills through further instruction and practice.

VOC GRP10 — Photo Editing with Photoshop
Basic techniques to adjust and modify photos using Photoshop software tools. Includes digital color theory and photo quality standards; practice photoscan reproduction, resolution and scaling, masking, layer editing and effects, filters, color correction and file formats; output for editing, restoring, and retouching.

VOC GRP12 — Advanced Photo Editing with Photoshop
Advanced training in Photoshop editing, color, exposure, sharpening and contrast enhancement, layer and object masking, vector tools, image compositing and the uses of blended modes; design of realistic and imaginary photo illustrations using 8- and 16-bit high resolution images.

VOC GRP14 — Digital Color Management
Advanced techniques of digital photo color management systems and workflow. System color architectures, monitors, printers, proofers and other digital devices; spectrophotometer techniques; scripting Photoshop actions, using “digital raw” meta data to organize photo storage; advanced special editing techniques for 16-bit raw color and grayscale images.

VOC GRP16 — Digital Image Design with Illustrator & Freehand
Advanced digital image drawing techniques using Adobe Illustrator or Macromedia Freehand. Includes software tools, applying color, using layers, typography, measurement, and paper systems. Practice importing photo scans, creating layouts, layer animation, choosing fonts, special effects, export file formats, and output in a digital workflow.

VOC GRP18 — Advanced Image Design – 3D Modeling Techniques
Advanced digital image drawing emphasizing creation of photorealistic 3D models and environments. Principles of perspective, coordinate space, photographic lighting, object animation, photo and video texture mapping, and common techniques for rendering still or animated QuickTime image movies for digital compositing and post-production.
cameras, studio product and portraiture, strobe and tungsten lighting, topics include but are not limited to: medium and large format assignments related to problems encountered in advanced photography. 

VOC PHO11 — Advanced Professional Photography

Explore the use of continuous tone and alternative black and white techniques and processes. Emphasis will be on solving photographic problems through the use of current techniques such as montage printing, Polaroid and xerographic applications, hand coloring, and emulsion coating (cyanotype, Luminous/LiquidLight) as well as other special techniques.

VOC PHO15 — History of Photography

Survey of the history of photography from circa 1839 to the present. An introduction to concepts of photographic representation and their impact on society.

VOC PHO16 — Fashion Photography

Illustrative, editorial and advertising fashion photography. Studio and location production in both black and white and color are emphasized. Aspects of business operation and working with clients are explored.

VOC PHO17 — Photocommunication

Explores the application of the photosensitive materials, photochemicals and optics. The emphasis will be on the aesthetic and expressive uses to which these materials lend themselves. The student is expected to supply his/her own adjustable camera.

VOC PHO18 — Portraiture and Wedding Photography

Techniques and photographic procedures for taking informal, formal, environmental and group portraits. In-depth study and practice in professional wedding photography.

VOC PHO20 — Color Photography

An introduction to current methods of producing color media, color negatives, positive transparencies, and outputting color prints.

VOC PHO21 — Exploring Color Photography

Explores the application of color processes as they relate to commercial and artistic styles. Emphasis is on innovative use of color and contemporary techniques. Includes media manipulation and unique processing, coloring negatives, 8x10 Polaroid, digital imagery, specialized lighting, set building and quality control.

VOC PHO22 — Photography Portfolio Development

Development of photography portfolio either for job application or gallery exhibition purposes.

VOC PHO23 — Commercial & Illustrative Photography

Application of photographic principles to commercial and illustrative photography. Practical experience in studio product photography, illustration, fashion and architectural photography. Areas of promotion and pricing will be covered. Both black and white and color media will be used.

VOC PHO24 — Exploring Commercial Photography

Techniques employing photographic principles to produce images for commercial use only. Projects include but are not limited to: mediums of large format cameras, studio product and portraiture, strobe and tungsten lighting, and computer basics for professional photographers.
### Community Education

**OCCUPATIONAL – THEATER & THEATER ARTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC THTR14</td>
<td>Stagcraft Theory and practice of stage design and lighting. Practical work in scene design and construction layouts, with the opportunity to perform these tasks in actual theatre situations. By virtue of the wide range of productions staged by the department, students who repeat this course will increase their skills and proficiency.</td>
</tr>
<tr>
<td>VOC THTR15</td>
<td>Play Rehearsal and Performance Participation under faculty supervision in the planning, preparation and presentation of college-sponsored dramatic presentations. Emphasis on acting with some technical theatre assignments. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>VOC THTR16</td>
<td>Theatrical Make-Up An introduction to the theory and practice of make-up for the stage. The student will gain practice in the design and application of straight, stylized character, and other make-up techniques.</td>
</tr>
<tr>
<td>VOC THTR18</td>
<td>Technical Theater Practicum Participation in the technical preparation and operation of productions presented to the community. The student will be involved in one or more of the following areas: stage scenery construction, stage lighting set up, property construction, stage sound set up, costume construction and make-up. Crew assignments will be given to the student upon enrollment. The availability of assignments is contingent upon the requirements of the production. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>VOC THTR19</td>
<td>Theatrical Costuming The study of costume history, principles of costume design, fibers and textiles, basic costume construction and design rendering techniques. Costume crew assignments for major productions will provide practical instruction in actual performance demands on costumes and their proper maintenance. Class is suitable for people interested in costume for theater, dance, film, television and reenactments.</td>
</tr>
<tr>
<td>VOC THTR60</td>
<td>Children’s Theatre A comprehensive study of theatre for the child audience in theory and practice. Specifically seeks to evaluate play production techniques and literature with an eye to the needs of an audience of children. Includes history of children’s theatre, analysis of plays for children and actual experience in acting, directing and producing children’s plays for public presentation. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>

**OCCUPATIONAL – WELDING**

<table>
<thead>
<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>VOC WLD30</td>
<td>Metal Sculpture For students interested in art seeking the proper operation of welding processes related to the sculpting industry. Emphasizes the fundamentals of three-dimensional design. Includes demonstrations and exercises in welding as it relates to the art industry.</td>
</tr>
<tr>
<td>VOC WLD40</td>
<td>Introduction to Welding Fundamentals of welding processes related to the areas of fabrication, construction, machine tool, aerospace and the transportation industries.</td>
</tr>
<tr>
<td>VOC WLD50</td>
<td>Oxyacetylene Welding Oxyacetylene fusion welding, non-fusion welding and cutting. Develops understanding of an and fundamental skills in modern welding practices.</td>
</tr>
<tr>
<td>VOC WLD51</td>
<td>Basic Electric Arc Welding Basic electric arc welding, weld symbols, standard electrode and alloy electrode selection, American Welding Society (AWS) procedure for certification.</td>
</tr>
<tr>
<td>VOC WLD60</td>
<td>Print Reading and Computations for Welders Reading prints and performing computations for welding fabrication operations. Interpreting and visualizing prints, title blocks, welding symbols, specifications, notes, and bills of materials. Computations necessary to calculate materials, costs, sizes, and fractional, decimal and metric conversions.</td>
</tr>
<tr>
<td>VOC WLD70A</td>
<td>Beginning Arc Welding A continuation of Beginning Arc Welding (WELD 70A). Emphasis is on welding high alloy steel with both SMAW and FCAW processes in the vertical and overhead positions. Designed to refine previously acquired welding skills.</td>
</tr>
<tr>
<td>VOC WLD70B</td>
<td>Advanced Arc Welding A continuation of Beginning Arc Welding (WELD 70A). Emphasis is on welding high alloy steel with both SMAW and FCAW processes in the vertical and overhead positions. Designed to refine previously acquired welding skills.</td>
</tr>
<tr>
<td>VOC WLD70C</td>
<td>Certification for Welders Study of building construction for the advanced arc welding student. Special emphasis will be placed on welding symbols and the American Welding Society's (AWS) D1.1 and D1.3.</td>
</tr>
<tr>
<td>VOC WLD80</td>
<td>Fabrication and Construction Welding Theory and practical applications of welding used in industry and construction. Designed to adapt and upgrade skills to industry standards. Includes project models such as ornamental iron gates and fences and material storage components.</td>
</tr>
</tbody>
</table>

**OCCUPATIONAL – WOODWORKING**

<table>
<thead>
<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>VOC WOOD01</td>
<td>Beginning Woodworking Designed for students with little or no wood-working experience. Includes use of hand tools and power woodworking equipment with an emphasis on safety.</td>
</tr>
<tr>
<td>VOC WOOD02</td>
<td>Intermediate Woodworking Prerequisite: VOC WOOD 01 or equivalent experience. Intermediate woodworking which includes designing, cost analysis, craftsmanship and occupational opportunities in the field. Elementary joinery, adhesives, simple production techniques, and wood finishes will be covered.</td>
</tr>
<tr>
<td>VOC WOOD03</td>
<td>Cabinetmaking/Woodworking Students who wish to take this course must have completed a beginning woodworking class. Project proposals are created by students in accordance with their background and interests. Includes recognition of wood varieties, basic characteristics and applications.</td>
</tr>
</tbody>
</table>

**OLDER ADULTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAD ART14</td>
<td>Introduction to Art Fundamentals An entry level course designed for non-art majors emphasizing creative expression through the visual arts. Painting, drawing, printmaking, and sculpture are explored to introduce the student through various media to the arts.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>OAD ART15B</td>
<td>Beginning Drawing</td>
</tr>
<tr>
<td>OAD ART20</td>
<td>Intro Exhibition Design and Professional Practice</td>
</tr>
<tr>
<td>OAD ART25A</td>
<td>Painting</td>
</tr>
<tr>
<td>OAD ART30A</td>
<td>Ceramics</td>
</tr>
<tr>
<td>OAD ART33</td>
<td>Ceramics – Hand Construction</td>
</tr>
<tr>
<td>OAD ART40A</td>
<td>Beginning Sculpture</td>
</tr>
<tr>
<td>OAD ART41A</td>
<td>Life Sculpture</td>
</tr>
<tr>
<td>OAD ART41B</td>
<td>Life Sculpture</td>
</tr>
<tr>
<td>OAD ART42</td>
<td>Sculpture – Mold Making</td>
</tr>
<tr>
<td>OAD ART43</td>
<td>Printmaking – Silk Screen and Intaglio</td>
</tr>
<tr>
<td>OAD ART44</td>
<td>Printmaking – Relief &amp; Lithography</td>
</tr>
<tr>
<td>OAD ART45</td>
<td>Printmaking – Silk Screening</td>
</tr>
<tr>
<td>OAD ART46</td>
<td>Sculpture – Special Effects Makeup</td>
</tr>
<tr>
<td>OAD EDSE02</td>
<td>Lifelong Learning for Older Adults – Physical Fitness</td>
</tr>
<tr>
<td>OAD EDSE03</td>
<td>Lifelong Learning for Older Adults – Crafts</td>
</tr>
<tr>
<td>OAD EDSE04</td>
<td>Lifelong Learning for Older Adults – Crafts</td>
</tr>
<tr>
<td>OAD ENGA</td>
<td>Creative Writing – Fiction</td>
</tr>
<tr>
<td>OAD ENG88</td>
<td>Creative Writing – Poetry</td>
</tr>
<tr>
<td>OAD FINA01</td>
<td>China Painting</td>
</tr>
<tr>
<td>OAD FINA03</td>
<td>Oil Painting</td>
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<tr>
<td>OAD FINA04</td>
<td>Watercolor Painting</td>
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<tr>
<td>OAD FINA05</td>
<td>Creative Writing (Writing your Autobiography)</td>
</tr>
<tr>
<td>OAD FINA32</td>
<td>Drawing – Beginning through Advanced</td>
</tr>
<tr>
<td>OAD FOKA04</td>
<td>Quilting</td>
</tr>
<tr>
<td>OAD HLTH02</td>
<td>Healthy Cooking for Older Adults</td>
</tr>
</tbody>
</table>
## COMMUNITY EDUCATION

### OAD MOEX01 — Mobility through Exercise – Physical Conditioning
For older adults who are interested in improving their physical condition. Involves all major muscles promoting strength and toning, improving range of motion and flexibility, and increasing endurance and coordination. Students are encouraged to participate at their own level. Appropriate music is utilized to enhance student motivation and class participation.

### OAD MOEX02 — Mobility through Exercise – Slow Stretch/Thai Chi Movement
Designed to increase strength and agility while improving peace of mind and reducing stress. Involves low impact movements that flow at a smooth, even tempo, making for improved balance as body weight is shifted. The movements will result in high levels of body control and increased powers of motion concentration. Several different moves of Tai Chi will be experienced.

### OAD MOEX04 — Mobility through Exercise – Yoga
Yoga is an ancient system of gentle stretching exercises and breathing techniques that enhance physical well-being. Focuses on Yoga methods that improve stamina, lung capacity, flexibility, muscle tone, circulation, cardiovascular performance and respiration.

### OAD MOEX06 — Mobility through Exercise – Water Exercise
This low impact water exercise program involves aerobic conditioning, strength training, and stretching in a water environment which minimizes impact on joints and the body. Swimming skills are not required for participants. This is not an individual swim class.

### OAD MOEX07 — Mobility through Exercise – Physical Fitness using Music to Enhance Skill Development
Enables students to increase balance, coordination, strength, flexibility, and memory function through a progressive fitness program using music to enhance skill development.

### OAD MOEX09 — Mobility through Exercise – Strength Training using Resistance Bands
Resistance training for isolation of targeted muscle groups to increase strength, range of motion, flexibility, and increase bone density using toner bands. Designed to challenge all major muscles. Students are encouraged to participate at their own level. In addition, slow stretching and breathing techniques will be taught.

### OAD MOEX10 — Beginning Self-Defense for Older Adults
Effective self-defense techniques for older adults to use at home, work, traveling or just out and about on a daily basis. The focus is on techniques that are highly effective and easy to learn, with no prior experience necessary. Learn self-defense techniques and gain knowledge to reduce your risk of becoming a victim of crime.

### OAD MOEX11 — Fall Prevention – Balance and Mobility
Addresses, particularly for older adults, the risks and fears associated with falling. Includes setting realistic goals, minimizing environmental risks and balance exercises.

### OAD MUS-C1 — Creative Expression through Music
Promotes creative expression through music and includes discussion, singing, listening and interaction for older adults. Concentration will be on various musical styles and historical periods in which music plays specific roles.

### OAD MUS01 — Concert Music
Lectures, demonstrations, recitals and media presentations by faculty, guest artists and students. Course content will differ each time it is offered. Attendance at live concerts may be required.

### OAD MUS19 — Elementary Organ
Group and individual instruction in registration, pedal technique, and interpretation of standard organ literature will be given in this course.

### OAD MUS25A — Jazz Improvisation (Instrumental or Voice)
Styles and techniques of improvisation. Each student must furnish his/her own instrument and be able to perform individually and with the class. Students who repeat this course will improve skills through further instruction and practice.

### OAD MUS25B — Jazz Improvisation
Styles and techniques of improvisation. Each student must furnish his own instrument and be able to perform individually and with the class.

### OAD MUS30 — Collegiate Chorale
A non-auditioned mixed chorale ensemble open to all students. A variety of repertoire will be studied and performed, from music of the Renaissance to contemporary Pop, Broadway, and Vocal Jazz. Rehearsal time will also be devoted to vocal development and improving music theory skills.

### OAD MUS32 — Masterworks Chorale
This SATB choir will perform major chorals works ranging from the Baroque era to the 20th century. Although there is no audition required for this group, prior choral experience is preferred. In addition to preparation and performance of quality choral literature from all genres, time will be spent on vocal development and music theory.

### OAD MUS38 — Ensemble
The study and performance of music written for small ensembles. Students who repeat this course will improve skills through further instruction and practice.

### OAD MUS39 — Laboratory Band
Study and performance of jazz and popular music of all types. Provides the necessary training and experience for MUS 47, Jazz Band, or for the improvement of skills necessary for employment in the field. Students who repeat this course will improve skills through further instruction and practice.

### OAD MUS47 — Jazz Band
Lectures, demonstrations, recordings, rehearsals, and performance will cover all types of popular music and jazz. Preference will be given to performers playing more than one instrument.

### VOC ESD02 — Production of Boutique Craft for Retail Sales
Prepares the student to create individual designs for mass production and/or one-of-a-kind crafts. Marketing, pricing, cost analysis and proper care of equipment included. Students will receive a supply list at the first class meeting.

### VOC ESD03 — Lettering Styles and Advertising Calligraphy
Presents styles of calligraphy as they are used in the arts, media, and advertising fields. Includes proper placement and proper size of lettering styles. Students will receive a supply list at the first class meeting.

### VOC ESD05 — Ceramics – Intermediate Production
Includes the techniques used to create finished ceramic pieces; including the art of chalking on ceramics in the bisque form and wood surfaces by using oil based stains, metallic stains, colored creams, rubs and metallic and bronze finishes. Finalizing some pieces with electrical parts and mounting on wood bases will be considered. Discusses proper equipment usage and maintenance. Marketing and cost analysis will be covered. Students will receive a supply list at the first class meeting.

### VOC ESD06 — Craft Painting for Business Opportunities
Painting on all types of surfaces including fabric, glass, wood, tin, plaster and plastic. Creativity and individual expression will be encouraged. Special painting techniques on each type of surface will be demonstrated and discussed. Includes product design, marketing and proper use of equipment and maintenance. Marketing and cost analysis will also be covered. Students will receive a supply list at the first class meeting.

### VOC ESD07 — Handcrafted Needlework for Retail Sales and Boutiques
Presents basic needlework techniques in knitting, crocheting, needlepoint, crewel embroidery, and plastic canvas for mass production as well as one-of-a-kind creations. Students solve fitting problems and make professional-looking garments. Includes proper yarn selection, pattern selection, proper maintenance of equipment and organization of work. Students will receive a supply list at the first class meeting.
VOC ESD08 — Jewelry Production and Design for Retail Sales
Wire-worked jewelry design and production for marketing. Techniques such as wire wrapping, coiling, hammering, etc., which may incorporate beads, cabochon stones and free-form gemstone slabs will be covered. Discussion of proper equipment and maintenance, proper display for sales purposes, pricing and inventory control will be taught. Students will receive a supply list at the first class meeting.

VOC ESD09 — Sewing and Design
Presents basic sewing techniques for mass production as well as one-of-a-kind creations. Learn to solve fitting problems and make professional looking garments. Tailoring, pattern making, cutting and style design will be taught. Students are responsible for their own supplies and equipment. Proper maintenance of equipment and organization of work will be covered. Students will receive a supply list at the first class meeting.

VOC ESD10 — Beginning Decorative Art Production for Retail Sales
Introduction to acrylic paints and associated mediums including painting on a variety of surfaces. The use of tole decorative art brush strokes will be incorporated into a step-by-step method on specific projects. Marketing and pricing of finished products will be presented.

VOC ESD11 — Intermediate Decorative Art Production for Retail Sales
Use of acrylic paints and associated mediums including painting on a variety of surfaces. Patterns are provided for student's use. More advanced tole decorative art brush stroke techniques will be incorporated into a step-by-step method on specific projects. Includes marketing and pricing of products. Students will receive a supply list at the first class meeting.

VOC ESD15 — Jewelry/Lapidary Production Design
Jewelry making and stone cutting/polishing, lapidary work. Includes appropriate maintenance of equipment and workshop safety. Includes outings to jewelry suppliers, shows and rock hunting trips.

PAED CHLD01 — Parent Participation Pre-School
Children's developmental stages and parenting skills through participation in discussions and classroom activities. Parents attend with their children, ages 2-5. Children participate in structured activities in preparation for future educational experiences.
Section 12
College Policies and Notices
Alcohol and Other Drugs

The possession or consumption of alcoholic beverages or illegal drugs prior to, or during any College-sponsored activity, on or off-campus, by any person attending, regardless of age, is forbidden by State law.

The Federal government has mandated that as of October 1, 1990, there will be no drug usage by students, staff, or faculty on college campuses anywhere in the United States. Please see the latest Schedule of Classes for the College's Alcohol and Other Drugs Policy.

Animals on Campus

Board Policy does not allow for any animals on campus except as provided for by the California Penal Code, Section 365.5 (specially trained guide, signal, or service dogs). Leaving a pet in a parked vehicle, no matter what provisions are made for its safety, may constitute unnecessary suffering or cruelty which is a violation of California Penal Code 597.

Campus Disturbances

In accordance with California Penal Code (P.C. 626.6), the willful disturbance of classes, College activities, or procedures is a misdemeanor.

Campus Hours

The College offers instruction between the hours of 6:30 a.m. and 10:00 p.m., Monday through Sunday. Office hours vary depending on the services provided. Refer to the latest Schedule of Classes or call for specific office hours.

Children on Campus

While on the campus of Mt. San Antonio College, children under 12 years of age who are not approved for enrollment must be directly supervised at all times by a responsible adult. Such children shall not be left unattended in College buildings, outdoor areas, or in private automobiles.

Classroom Visitors

No person may be allowed to attend a regularly scheduled class unless officially registered for that class. Permission to visit a class must be secured from the professor. A visitor shall not attend class on a regular basis. Examples of visitors include: guest speakers, student friends, potential students, or minor children of officially registered students. Unauthorized visitors may be removed from the classroom by request of the Division Dean or designee, or other manager of the Instruction or Student Services Team.

Dress Regulation

Students are expected to dress in accordance with commonly accepted standards of appropriateness. It is mandatory that shoes be worn as general campus attire.

Driving and Parking

Users of Mt. San Antonio College campus roads and parking areas must observe and obey all traffic laws of the State of California and the College traffic and parking regulations adopted pursuant to Section 21113 of the California Vehicle Code and the Mt. San Antonio College Board of Trustees.

All four-wheeled vehicles parked in designated student lots MUST bear a valid parking permit for the semester enrolled. The Student Parking Permit is valid in designated student lots except in the spaces controlled by parking meters or reserved signage. Free 30-minute parking is available north of the Bookstore, west of the Administration Building, and south of the Performing Arts Center. Permit parking regulations are strictly ENFORCED during the Fall, and Spring semesters and summer and winter sessions from 7:00 a.m. to 10:00 p.m. Monday through Thursday, and Friday 7:00 a.m. to 4:00 p.m.

Eye Protection

Pursuant to the Education Code, the following regulation regarding eye protective devices shall be observed: Students, teachers, and visitors shall wear approved eye protective devices in all classes, shops, and laboratories when they are engaging in or observing the use of hazardous materials likely to cause injury to the eyes. Such eye protective devices shall meet the requirements of the American Standards Association Safety Code.

Academic Honesty

All members of the academic community have a responsibility to ensure that scholastic honesty is maintained. Faculty has the responsibility of planning and supervising all academic work in order to encourage honest and individual effort, and of taking appropriate action if instances of academic dishonesty are discovered.

Honesty is primarily the responsibility of each student. The College considers cheating to be a voluntary act for which there may be reason, but for which there is no acceptable excuse. It is important to understand that collaborative learning is considered cheating unless specifically allowed for by the professor.

Cheating and Plagiarism

Cheating

Professors have the responsibility of planning and supervising all academic work to encourage honest and individual effort, and of taking appropriate action if instances of academic dishonesty are discovered. However, honesty is primarily the responsibility of each student. The College considers cheating to be a voluntary act for which there may be reasons, but for which there is no acceptable excuse. It is important to understand that collaborative learning is considered cheating unless specifically allowed for by the professor. The term “cheating” includes but is not limited to:

- Plagiarism;
- Receiving or knowingly supplying unauthorized information;
- Using unauthorized material or sources;
- Changing an answer after work has been graded and presenting it as improperly graded;
- Illegally accessing confidential information through a computer;
- Taking an examination for another student or having another student take an examination for you; and
- Forging or altering registration or grade documents.

The professor who determines that a student has cheated may give the student a failing grade for the assignment or for the course, or may drop the student from the course. Since the student has failed to abide by the standards of academic honesty, the professor has a right to give an “F” for the assignment or the course even though the student may have successfully and, presumably honestly passed the remaining portion of the assignment or course. If the professor issues a failing grade for the course or drops the student, the actions shall be reported to the Dean of Student Services, and Director of Student Life. An instructor may also recommend that appropriate action be taken under provisions of the Administrative Regulations and Procedures on Student Discipline.

Plagiarism

"Plagiarism is a direct violation of intellectual and academic honesty. Although it exists in many forms, all plagiarism refers to the same act: representing somebody else's words or ideas as one's own. The most extreme forms of plagiarism are the use of material authored by another person or obtained from a commercial source, or the use of passages copied word for word without acknowledgment. Paraphrasing an author’s idea or quoting even limited portions of his or her text without proper citation is also an act of plagiarism. Even putting someone else’s ideas into one’s own words without acknowledgment may be plagiarism. In none of its forms can plagiarism be tolerated in an academic community. It may constitute grounds for a failing grade, probation, suspension, or expulsion."

“One distinctive mark of an educated person is the ability to use language correctly and effectively to express ideas. Faculty assign written work for the purpose of helping students achieve that mark. Each instructor will outline specific criteria, but all expect students to present work that represents the student's understanding of the subject in the student's own words. It is seldom expected that student papers will be based entirely or even primarily on original ideas or original research."

"Therefore, to incorporate the concepts of others may be appropriate with proper acknowledgment of sources, and to quote others directly by means of quotation marks and acknowledgments, is proper. However, if a paper consists entirely of quotations and citations,
College Policies and Notices

the paper should be rewritten to show the student’s own understanding and expressive ability. The purpose of the written assignment (i.e., development of communication and analytic skills) should be kept in mind as each paper is prepared. It should not be evaded through plagiarism.*

* Adopted, with permission of California State University, Los Angeles, from their policy printed in the 1987-88 General Catalog.

Non-Discrimination Policy

Mt. San Antonio College provides opportunities for the pursuit of excellence for all students and staff through its educational programs and services. The purpose of all programs, services, activities, conferences and college-sponsored competitions is to enrich the quality of human life. The College will provide open access to a college education and all support services without regard to sex, race, color, religious creed, national origin, ancestry, age over 40, marital status, physical or mental disability (including HIV & AIDS), sexual orientation, or Vietnam Era Veteran Status. The lack of English language skills will not be a barrier to admission. Policies and grievance procedures for unlawful discrimination and complaint procedures for sexual harassment for students and employees may be obtained by contacting the following individuals:

Trinda Hoxie, Director
Human Resources/Affirmative Action Officer
Human Resources Office
Building 4, Room 230, Ext. 4225

Audrey Yamagata-Noji, Vice President
Student Services
Student Services Center, Ext. 4505

Carolyn Keys, Dean of Student Services
Building 9C, Room 1A, Ext. 4525

Sexual Harassment & Sexual Violence

Sexual violence, including sexual assault, harassment, rape and stalking, are crimes that are not tolerated on this campus. Mt. San Antonio College has adopted Board policies and procedures to address sexual crimes, sanctions for offenders, and to outline access to treatment and general information for victims. (Board Policy 3430, 3500, 3540). All applicable punishment, including criminal charges, disciplinary action, etc., shall be applied whether the violator is an employee, student or member of the general public.

Service available to help assure your safety include:

- **Campus Escorts** who are available during evening hours to assure your safety on campus and in parking lots. They are provided at your request, please call ext. 4233.

- **Blue emergency telephone** towers that are located throughout the campus and parking lots for you to access Public Safety immediately should you need assistance with any emergency occurrence.

- **Public Safety** can be reached by calling the campus number at (909) 594-5611, ext. 4555.

- **911** for any emergency. Be prepared to identify your exact location. For additional information, go to www.mtsac.edu/students

Standards of Conduct

Board Policy, Section 5500

Adopted 6/23/04

Copies of the Standard of Conduct Policy can be obtained in Building 9C.

The College President/CEO shall establish procedures for the imposition of discipline on students in accordance with the requirements for due process of the federal and State law and regulations.

The procedures shall clearly define the conduct that is subject to discipline, and shall identify potential disciplinary actions, including but not limited to the removal, suspension, or expulsion of a student.

The Board shall consider any recommendation from the College President/CEO for expulsion. The Board shall consider an expulsion recommendation in closed session unless the student requests that the matter be considered in a public meeting. Final action by the Board on the expulsion shall be taken at a public meeting.

The procedures shall be made widely available to students through the College catalog and other means.

The following conduct shall constitute good cause for discipline, including but not limited to the removal, suspension or expulsion of a student:

1. Causing, attempting to cause, or threatening to cause physical injury to another person.

2. Possession, sale or otherwise furnishing any firearm, knife, explosive or other dangerous object, including but not limited to any facsimile firearm, knife or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a College employee, which is concurred with by the College President/CEO.

3. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in Chapter 2 (commencing with Section 11053) of Division 10 of the California Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5.

4. Committing or attempting to commit robbery or extortion.

5. Causing or attempting to cause damage to College property or to private property on campus.

6. Stealing or attempting to steal College property or private property on campus, or knowingly receiving stolen College property or private property on campus.

7. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the College.

8. Committing sexual harassment as defined by law or by College policies and procedures.

9. Engaging in harassing or discriminatory behavior based on national origin, religion, age, sex (gender), race, color, medical condition, ancestry, sexual orientation, marital status, physical or mental disability, or because a person is perceived to have one or more of the foregoing characteristics.

10. Willful misconduct that results in injury or death to a student or to College personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the College or on campus.

11. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, College personnel.

12. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty.

13. Dishonesty, forgery, alteration or misuse of College documents, records or identification; or knowingly furnishing false information to the College.

14. Unauthorized entry upon or use of College facilities.

15. Lewd, indecent or obscene conduct on College-owned or controlled property, or at College-sponsored or supervised functions.

16. Engaging in expression which is obscene, libelous or slanderous; or which so incites students as to create a clear and present danger to safety and orderly operation of the College.

17. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.

18. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any College policy or Administrative Procedure.

19. Harassment of students and/or College employees that creates an intimidating, hostile, or offensive environment.
20. Violation of College rules and regulations including those concerning affiliate clubs and organizations, the use of College facilities, the posting and distribution of written materials, and College safety procedures.

**Student Complaints/Grievance Process**

Students are protected against capricious, arbitrary, unreasonable, unlawful, false, malicious or professionally inappropriate evaluations or behavior by a faculty member. Student complaints may be classified as grievances and fall into three categories: Academic, Non-Academic and Discrimination Complaints. Academic grievances involve grades. To grieve a grade, a student must prove that the professor issued a grade by mistake, fraud, bad faith, or incompetence (Education Code 76224). Non-Academic grievances include: illegal discrimination, sexual harassment, financial aid violation, College policies, any violation of Title IX or Section 504 related to students with disabilities.

Grievances must be filed no later than 30 school days (Monday-Friday when classes are in session) after the beginning of the primary term following the alleged violation, or 30 school days from the time that the student learns of the basis for the grievance. To begin the formal grievance process, students may pick up Grievance Procedures and forms from the Student Life Office, Building 9C. It is recommended that students meet with the Student Life Director regarding the grievance prior to starting the process since timelines are established for every step of the process and must be met precisely.

The process for filing and pursuing a grievance includes two levels: in **Level I** (informal level) the student picks up the grievance forms and official procedures from Student Life and attempts to resolve the problem by meeting first with the faculty member (or staff member/administrator for non-academic grievances) and then to the faculty member’s department chair or immediate supervisor. If the complaint is not resolved at that level, the student will meet with the division dean of the division of the faculty defendant in an effort to resolve the problem. In the event that the problem cannot be resolved within 10 school days, the student may proceed to **Level II** (formal grievance) in which the student after completing the forms takes all signed forms and documents to the Student Life Office within the established deadlines.

A Grievance Review Committee chaired by the Dean of Student Services will review the grievance documents. This Committee may forward the grievance for a hearing that provides for a formal hearing process to seek clarification from the parties involved. If the student or faculty/staff member chooses to appeal the decision of the Committee, the appeal is submitted to the College President. The final appeal process resides with the Board of Trustees; their decision concludes the grievance process.

**Smoking on Campus**

Student, employee, and visitor health is a primary concern of Mt. San Antonio College. Because of the clear evidence of the harmful nature of smoke inhalation and because of the general concern over air contamination, Mt. San Antonio College in accordance with California State law, bans smoking within all campus buildings and in any outdoor area within twenty feet of any exterior exit or entrance to such a building. This includes all College–leased and College occupied buildings. Further, smoking is banned in the swimming pool area, Hilmer Lodge Stadium, and in all college vehicles.

**Policy for Providing Academic Adjustments for Students with Disabilities**

Under Federal and State laws, the College is required to make modifications to academic requirements and practices as necessary in order to ensure that they do not discriminate against a qualified student with a disability. The College is also required to have a policy and procedure for responding to students with verified disabilities who request academic adjustments. Students with disabilities have the right to receive reasonable academic adjustments in order to create an educational environment where they have equal access to instruction without fundamentally altering any course, educational program or degree. Copies of the Policy and Procedures for Providing Academic Adjustments for Students With Disabilities are available in Disabled Student Programs & Services, ext. 4290.

**Reserve Officer Training Corps (ROTC)**

Students interested in pursuing a military career can participate in an approved Reserve Officer Training Corps program offered through local universities. Programs include the Air Force ROTC Program offered through the University of Southern California (USC) and Harvey Mudd College. Other university ROTC programs include the Navy ROTC programs at Cal Poly Pomona, USC and Cal State Long Beach. These programs are open to community college students pursuing an undergraduate degree, prior to transfer. Competitive one- to four-year scholarships are available to qualified applicants. Additionally, students may be eligible to receive money to cover books and other costs. Students interested in participating in an ROTC program are advised to contact the ROTC program at the participating university.

**NOTICES**

**Equal Opportunity Statement**

The Board of Trustees of Mt. San Antonio College has a commitment to establishing and maintaining a policy of equal educational and employment opportunities and prohibiting discrimination based on sex, race, color, religious creed, national origin, ancestry, age over 40, marital status, physical or mental disability (including HIV & AIDS), sexual orientation, or Vietnam Era Veteran Status. This commitment applies to educational programs, activities, service, and employment practices.

**Notice of Students’ Rights**

Students at Mt. San Antonio College are notified annually of their rights under the act within this section of the Catalog. More detailed information on student rights is available from the Dean, Enrollment Management, including: 1) type of information and material contained within the student’s educational record; 2) the official responsible for the maintenance of each type of record; 3) the procedure for student review and inspection of the educational record; 4) the procedure for challenging the contents of the educational record; 5) the charges to the student for reproducing copies of the record if requested; 6) the categories of information which the College has designated as Directory Information and to whom this information will be released unless the student objects; and 7) the rights of a student to file a complaint with the United States Department of Education concerning alleged failure of the College to comply with the provisions of the Act.

**Federal Review Board**

Students may file a complaint with the United States Department of Education, Room 5660, Independence Avenue, S.S., Washington, D.C. 20201, regarding alleged institutional violations of the Act.

**Open Enrollment**

All classes are open to all students who meet the course prerequisites and enrollment requirements, unless specifically exempted by statute. The College provides open access to all program offerings, opportunities, and support services without regard to sex, race, color, religious creed, national origin, ancestry, age over 40, marital status, physical or mental disability (including HIV and AIDS), sexual orientation, or Vietnam Era Veteran Status.

**Public Safety**

In compliance with the Clery Act, the College publishes an annual security report which contains information regarding campus crime statistics. This information may also be found on the website at [www.mtsac.edu](http://www.mtsac.edu) by clicking on Public Safety. Copies of the annual report can be obtained from the Public Safety Department, Building 4, Room 105. A Public Safety crime log is published bi-monthly in the student newspaper and brochures on Emergency Procedures are posted throughout the campus.

During the 2003-2005 calendar years, criminal offenses occurring on campus were reported to campus security authorities and local police agencies. Please see the Public Safety Department Statistical Crime Report listed in the box on the next page.

**Emergency Procedures**

Students and staff should report serious crimes and emergencies, i.e., fire/medical, occurring on campus to the Public Safety Department or
College Policies and Notices

PUBLIC SAFETY DEPARTMENT STATISTICAL CRIME REPORT

<table>
<thead>
<tr>
<th>Violation</th>
<th>2005</th>
<th>2006</th>
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<tbody>
<tr>
<td>Murder</td>
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<td>0</td>
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<tr>
<td>Rape</td>
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<tr>
<td>Assault</td>
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<td>17</td>
<td>4</td>
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<td>Weapons Violation</td>
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<td>3</td>
<td>2</td>
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<td>Hate Crimes</td>
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<tr>
<td>Arson</td>
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<td>Burglary</td>
<td>11</td>
<td>11</td>
<td>8</td>
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<tr>
<td>Burglary from Vehicle</td>
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<td>28</td>
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<tr>
<td>Theft</td>
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<tr>
<td>Illegal Drugs</td>
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<tr>
<td>Yearly Totals</td>
<td>135</td>
<td>174</td>
<td>175</td>
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</table>

call 911. When using an on-campus extension, call 9-911. Incidents may be reported to Public Safety by calling (909) 594-5611, ext. 4555, 24 hours a day. During normal business hours, Public Safety may be contacted at Building 4, Room 105, or by calling ext. 4230. The Public Safety Department is located at the southeast portion of the campus off Bonita Drive in Building 4B. Public telephone locations on campus have at least one phone that is equipped with a red emergency button that is a direct line to the Mt. SAC Public Safety Office during and after business hours. In the event of an emergency, students and staff are requested to make a prompt and accurate report to the Public Safety Department.

Enforcement

The Mt. San Antonio College Public Safety Department has the authority to enforce the Student Discipline Code of Conduct under the Education and Penal Codes of the State of California, and is the liaison with local police and sheriffs departments in cases of criminal actions.

Mt. San Antonio College District incident reports are not official police reports. If an official police report is required, the Los Angeles County Sheriffs Department in Walnut is the appropriate agency to contact.

Crime Prevention

The Public Safety Department’s primary responsibility is the safety and security of all members of the College community. Every effort is made to inform students and staff of criminal activity or any other concern that may be an immediate threat to the safety and security of those on campus. Information and workshops on crime prevention are made available to College students and staff. It is the responsibility of every member of the campus community to act in ways that promote the safety of self, others, and the protection of District property.

Campus Emergency Phone System

Mt. San Antonio College has installed a campus wide emergency phone system. This system is divided into two primary segments. The inner segment consists of emergency phones that are located on the outside of selected campus buildings and are identified by the familiar blue light affixed to the top of the phone housing. The second segment of emergency phones consists of stand-alone emergency phone towers, located in open campus spaces, primarily in campus parking lots. These phone towers are identified by a blue light affixed to the top of the tower.

Use of any of these emergency phones will connect the user to Campus Security during normal business hours, located in Building 4. During hours when the campus is closed, the Emergency phones will connect the user directly to a cell phone carried by Campus Security Officers who are on duty 24 hours a day, 7 days a week.

Student Rights and Privacy Act

Following is a summary of the Mt. San Antonio College policy related to the Family Educational Rights and Privacy Act of 1974, Title 9, Section 99-380, and Chapter 1297, Statutes of 1976, State of California:

Access to Educational Records

All former and present students have the right to review and inspect their educational records in the Office of Admissions and Records provided they make a written request within 15 days in advance. A review will be under the direct supervision of a classified or certificated employee in the Admissions and Records Office. Expressly exempted from the right of review and inspection are the following materials:

1. Financial records of the parents of the student(s).
2. Confidential letters and statements of recommendation maintained by the College for the purpose of evaluating a student or in the selection of a student.
3. Records of instructional, supervisory, counseling, and administrative personnel which are in the sole possession of such personnel and are not accessible or revealed to any other person except a substitute.
4. Records of employees of Mt. San Antonio College, made and maintained in the normal course of business which relate exclusively to such person in that person’s capacity as an employee, are not available for use for any other purpose.
5. Records of students made and maintained by the Student Health Services, the College nurse, the College physician, and the College therapist, which are used in the treatment of students and are not available to anyone other than persons providing such treatment. However, such a record may be personally reviewed by a physician or other appropriate professional of the student’s choice.

Release of Educational Records Information

1. Any release of a student’s educational records, with the exception listed below, must be made with the student’s written consent.
2. The College may release copies of or otherwise divulge material in the student’s educational records only to the official agencies, groups, officials, or individuals specifically mentioned below:
   a. College staff members; provided that such employees have a legitimate educational interest to inspect such a record.
   b. Representatives of the Comptroller General of the United States, the Secretary of Education, and administrative head of an educational agency, state education officials, and the United States Office of Civil Rights, where such information is necessary to audit a program.
   c. Accrediting organizations in order to carry out their accrediting functions.
   d. Organizations conducting studies on behalf of the institution.
   e. Officials of other schools or school systems in which the student seeks or intends to enroll subject to the rights of students.
   f. Agencies or organizations in connection with a student’s application for financial aid.
   g. Organizations conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, and administering predictive tests, administering student aid programs, and improving instruction, if such studies are conducted in such a manner as will not permit the personal identification of students or their parents by persons other than representatives of such organizations and such information will be destroyed when no longer needed for the purpose for which it is compiled.
   h. Appropriate persons in connection with an emergency if the knowledge of such information is necessary to protect the health and safety of the student or other persons.
   i. Courts or other agencies in compliance with a subpoena or judicial order. A reasonable effort will be made to notify the student in advance of the compliance by the College.

Directory Information:

a. “Directory Information” means a student’s name, community of residence, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous public or private school attended by the student.
b. Any student desiring to withhold "Directory Information" may file a written request with the Dean, Enrollment Management, within fifteen (15) days of the opening day of each semester or session that the student does not want such information released.

c. The College reserves the right to limit or deny the release of specific categories of directory information based upon a determination of the best interests of the student(s).

The 1996 Solomon Amendment

The 1996 Solomon Amendment is federal law that compels institutions that receive federal funding to provide (upon request) directory information, plus address, phone number, age and class level to military personnel so that these personnel can recruit students.

Transfer of Information to Third Parties

Educational records or personal information transferred to other institutions or agencies will not be transferred to a third party without the written consent of the student.

Student Right-to-Know Rates

Completion Rate: 41.2%
Transfer Rate: 16.9%

From 2003 Cohort Data

In compliance with the Student-Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of the Mt. San Antonio Community College District and Mt. San Antonio College to make available its completion and transfer rates to all current and prospective students. Beginning in Fall 2003, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students were tracked over a three-year period. These rates do not represent the success rates of the entire student population at Mt. San Antonio College, nor do they account for student outcomes occurring after this three-year tracking period.

Based upon the cohort defined above, 41.2 percent attained a certificate or degree or became 'transfer-prepared' during a three-year period, from Fall 2003 to Spring 2006. Students who are 'transfer-prepared' have completed 56 transferable units with a GPA of 2.0 or better.

Based on the cohort defined above, 16.9 percent transferred to another postsecondary institution, (UC, CSU, or another California Community College) prior to attaining a degree, certificate, or becoming 'transfer-prepared' during a five semester period, from Spring 1997 to Spring 2006.
Section 13
The Faculty
<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Department</th>
<th>Education</th>
<th>Other Information</th>
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<tr>
<td>Alvarez-Galvan, Maya</td>
<td>2000</td>
<td>English, Literature &amp; Journalism</td>
<td>B.A., University of Southern California</td>
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<td>Allen-Kodama, Linda</td>
<td>1991</td>
<td>Fine Arts</td>
<td>A.A., Mt. San Antonio College</td>
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<td>Allen-Lopez, Frank</td>
<td>2000</td>
<td>English, Literature &amp; Journalism</td>
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<td>Allende, Kristina</td>
<td>2001</td>
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<td>Andrade, Renee</td>
<td>1984</td>
<td>Foreign Languages</td>
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<td>Andrews, Barry</td>
<td>2001</td>
<td>Computer Information Systems</td>
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<td>Arballo, Malvyn</td>
<td>1998</td>
<td>Director, Basic Skills</td>
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<td>Archibald, Jeffrey</td>
<td>2000</td>
<td>Communication</td>
<td>B.A., Cornell University</td>
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<td>Arterburn, Pamela</td>
<td>1986</td>
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<td>Arvidson-Perkins, Genene</td>
<td>1988</td>
<td>Nursing</td>
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<td>Austin, Jerry</td>
<td>2003</td>
<td>Director, Fire Technology</td>
<td>A.A., University of California, Los Angeles</td>
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<td>Baccalapui, Stacy</td>
<td>2006</td>
<td>Psychology, Education</td>
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<td>Bartman, Sydney</td>
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<td>Beam, Teresa</td>
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<td>Chemistry</td>
<td>B.S., Ohio University</td>
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<td>Becker, Lisa</td>
<td>1998</td>
<td>Assistant Director, ESL &amp; Intercultural Programs</td>
<td>B.A., California State University, Fullerton</td>
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<td>Beeman, Laura</td>
<td>1996</td>
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<td>Interim Dean, Instructional Services</td>
<td>A.A., M.T. San Antonio College</td>
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<td>Educational Technology</td>
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THE FACULTY

Bowen, Melinda (2006)  
Physical Education/Head Coach, Women's Soccer  
B.A., California State Polytechnic, Pomona  
M.A., Azusa Pacific University

Bowen, Robert (2006)  
Music  
B.A., M.A., University of California, Santa Barbara  
M.F.A., Ph.D., Princeton University

Bowen, Patricia M. (1990)  
Learning Assistance  
B.S., M.A., University of California, Los Angeles

Boyer, Michelle (2007)  
Nursing  
B.A., Plattsburgh State University  
M.A., Syracuse University

Brackenhoff, Mary (1991)  
English, Literature & Journalism  
B.A., Southern Illinois University  
Ph.D., University of Nebraska

Bradley, Julie (2005)  
Disabled Student Programs & Services  
B.A., University of California, Riverside  
M.S., California State University, Los Angeles

Bradshaw, George R. (2007)  
Dean, Enrollment Management  
B.A., M.A., California State University, San Bernardino  
Ph.D., University of Utah

Brantingham, John (2002)  
English, Literature & Journalism  
B.A., California State Polytechnic University, Pomona  
M.F.A., California State University, Long Beach

Braver, Lane (1987)  
Medical Services  
A.A., Santa Monica College  
P.A., U.S.C. School of Medicine  
M.S.H.FE, Western University, Pomona

Bray-Ali, Julie (2001)  
Earth Sciences, Astronomy  
B.A., California State Polytechnic University, Pomona  
M.S., University of Southern California

Bridges, Karen (2007)  
Earth Sciences, Astronomy  
B.A., Smith College, Northampton  
M.S., University of Massachusetts, Amherst

Bro, Glenda (1991)  
American Language  
B.A., Dana College  
M.S., University of Nebraska  
TESOL Certificate, California State University, Fullerton

Brouillette, Ronald (1989)  
English, Literature & Journalism  
B.A., M.A., California State University, Fullerton

Brown, Ronald (2006)  
Fine Arts  
B.F.A., Art Center College of Design

Buff, Haskell (2007)  
Physical Education  
B.S., Southern Utah University  
M.Ed., University of Nevada, Las Vegas

Burgoo, Steve (2002)  
Commercial and Entertainment Arts  
B.A., University of Phoenix

Burley, Virginia (1986)  
Interim Vice President, Instruction  
B.A., California State University, Northridge  
M.A., Ph.D., Claremont Graduate University

Burman, Ema (2007)  
Learning Assistance  
B.S., M.Ed., University of La Verne

Burnes, Fatemeh (1992)  
Fine Arts  
B.A., Tehran University, Iran  
B.A., M.F.A., California State University, Fullerton

Burnett, Cynthia D. (1997)  
Counseling  
B.S., Northern Illinois University  
M.A., International Christian Graduate University  
M.S., California State University, Long Beach

Burns, Donna (2002)  
Director, ESL & Intercultural Programs  
B.S., M.A., Azusa Pacific University

Burton, Robert E. (1990)  
Aircraft Maintenance & Manufacturing  
A.S., Mt. San Antonio College  
F.A.A. Certified, Airframe and Powerplant  
F.A.A. Certified, Inspector Authorization

Calkins, Katherine (1974)  
Music  
A.A., Fullerton College  
B.M., M.A., California State University, Fullerton

Calzada, Silver (1999)  
Counseling  
B.A., Pitzer College  
M.A.T., Harvard University

Cannon, Holly (1988)  
English, Literature & Journalism  
B.A., M.A., California State University, Northridge

Cannon, Kathleen (2005)  
History, Art History, Geography, Political Science  
B.A., M.A., M.F.A., Ph.D., University of California, Los Angeles

Caputo, Mario V. (1993)  
Earth Sciences, Astronomy  
B.S., San Diego State University  
M.S., Northern Arizona University  
Ph.D., University of Cincinnati

Castellano, Timothy (2006)  
Earth Sciences, Astronomy  
B.S., San Jose State University  
M.S., California State University, Santa Cruz  
Ph.D., University of California, Fullerton

Castillejos, Manuel (1989)  
Foreign Languages  
B.A., California State University, San Diego  
M.A., California State University, Fullerton

Cavion, Deborah (1994)  
Physical Education  
B.S., California State Polytechnic University, Pomona  
M.A., Azusa Pacific University

Cevallos-Castaneda, Susan (2005)  
Learning Assistance  
B.A., M.S., California State University, Fullerton

Chabot, Mary A. (1985)  
Mathematics, Computer Science  
B.A., Fordham University  
M.S., University of Notre Dame

Chamberlain, Alison (2006)  
Biological Sciences  
B.S., California State University, Bakersfield  
M.S., California State Polytechnic, San Luis Obispo

Chang, Chih-Ping (Andrew) (1997)  
Foreign Languages  
B.Ed., National Changhua University of Education  
M.A., National Taiwan Normal University  
Ph.D., University of Southern California

Commercial and Entertainment Arts  
B.A., California State University, Long Beach  
M.A., California State University, Fullerton  
Ed.D., University of La Verne

Chavez, Raul S. (2000)  
History, Art History, Geography, Political Science  
B.S., California State Polytechnic University, Pomona  
M.A., California State University, Los Angeles  
Ph.D., University of California, Riverside

Chemistry  
B.S., University of California, Irvine  
M.S., Ph.D., University of California, Los Angeles

2008-09 Mt. San Antonio College Catalog
Chen, Gou-Ling Susie (2003)
Nursing
B.S.N., National Taipei College of Nursing
B.S.N., Kaohsiung Medical College
M.A., Oklahoma City University
M.N., University of California, Los Angeles
Lifetime Instructor Credential, National Taiwan Normal University

Chen, Meghan (2000)
Director, Learning Assistance Center
B.S., University of California, Los Angeles
M.P.A., California Lutheran University
M.A., California State University, Los Angeles

Chevalier, Jason (2000)
Music
B.A., M.A., California State University, Fullerton

Christopher, Micol (2005)
Earth Sciences, Astronomy
B.A., Harvard University
M.S., California Institute of Technology

Churchill, Peter (2005)
English, Literature & Journalism
B.A., M.A., California State University, Fullerton

Condra, Denise (2006)
Nursing
B.A., M.N., Azusa Pacific University

Cooper Mark J. (1997)
Biological Sciences
B.S., M.S., California State Polytechnic University, Pomona

Coreas, Kelly (2000)
Respiratory Therapy
A.S., East Los Angeles College
B.S., Loma Linda University
M.S., Western University Pomona

Craft, Thomas (2007)
Physical Education
B.A., San Diego State University
M.A., Azusa Pacific University

Crespo, Beverly Baker (1980)
Office Technology
A.A., Long Beach City College
B.S., California State University, Long Beach
M.S., California State Polytechnic University, Pomona

Child Development
B.S., California State University, Fullerton
M.S., Pacific Oaks College

Daland, William (2005)
Counseling
B.A., California State University, Fullerton
M.S., California State University, Long Beach

Daum, Sarah (1998)
Dean, Technology & Health
A.B., Stanford University
M.S., University of Michigan
Ed.D., Nova Southeastern University

Davis, Maria (2005)
Consumer Science & Design Technologies
B.A., American InterContinental University

Davis, R. Gary (1972)
Theater
B.A., M.A., Occidental College

DeGyzyreva, Anna (1999)
Computer Information Systems
B.S., M.S., Leningrad University for Economics Engineers
M.S., California State University, San Bernardino

Deines, Craig B. (1997)
Fine Arts
B.A., M.F.A., Central Washington University

DePaola, Gina (1991)
English, Literature & Journalism
B.S., Metropolitan State College, Denver
M.S., California State University, Long Beach

Diederichs, Melanie (1991)
Child Development
A.A., Riverside City College
B.S., M.Ed., California State University, Fullerton

Di Mauro, Eileen (1991)
Chemistry
B.A., University of California, Santa Barbara
M.S., University of California, Irvine

Di Mauro, Eileen (1991)
Chemistry
B.A., University of California, Santa Barbara
M.S., University of California, Irvine

D’Innocenzo, Patrick (1989)
Aircraft Maintenance & Manufacturing
A.S., Mt. San Antonio College
F.A.A. Certificate, Airframe and Powerplant
F.A.A. Certified Designated Mechanic Examiner

Distante, Debbie (2000)
Librarian
B.A., Morningside College
M.A., University of Iowa

Domico, Brenda L. (1997)
Accounting & Management
B.S., M.B.A., California State Polytechnic University, Pomona
Certified Managerial Accountant

Dougherty, George D. (1991)
Sign Language
A.A., Rochester Institute of Technology
B.A., M.Ed., University of Massachusetts

Dowdle, Michael (2005)
Psychology, Education
A.A., Butte Community College
B.A., M.A., California State Polytechnic University, Chico

Dua, Amrik Singh (1990)
Business Administration
B.A., M.A., Panjab University
M.A., Dalhousie University
Ph.D., Southeastern University

Dyer, Dorothy J. (1985)
RHORC
B.S.N., California State University, Los Angeles
Standard Designated Teaching Credential: Subject Field Nursing, Special Sciences and Pan African Studies
M.S., California State University, Los Angeles
M.S., Nursing — Secondary in Nursing Education California State University, Dominguez Hills

Earhart, Kimberly (2005)
History, Art History, Geography, Political Science
A.A., Riverside Community College
B.A., M.A., Ph.D., University of California, Riverside

Eastman, Ralph M. (1980)
Theater
B.A., Antioch College, Ohio
M.A., Trinity College, Connecticut
M.F.A., University of California, Los Angeles

Eatman, Elisabeth (2006)
Consumer & Design Technologies
B.F.A., California State University, Long Beach

Edson, Thomas (2006)
English, Literature & Journalism
B.A., University of California, Irvine
M.A., Chapman University

Edwards, William (2005)
Mathematics, Computer Sciences
B.S., M.S., California State Polytechnic University, Pomona

Eisley, Benjamin N. (1990)
Air Conditioning & Welding
B.A., Cerritos College
B.S., M.S., Eastern Michigan University

Ellwood, Jeffrey (2006)
Music
B.M., Berklee College of Music
M.M., California State University, Fullerton
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<td>Disabled Student Programs &amp; Services</td>
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<td>Hanson, Grace (1996)</td>
<td>Director, Disabled Student Programs &amp; Services</td>
<td>B.A., M.A., California State University, Long Beach</td>
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<td>Sociology, Philosophy</td>
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<td>Dean, Business</td>
<td>A.S., Long Beach City College</td>
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<td>English, Literature &amp; Journalism</td>
<td>B.A., University of Redlands</td>
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<td>Counseling</td>
<td>B.A., M.A., California State University, Pomona</td>
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<td>Agricultural Sciences</td>
<td>A.S., Mt. San Antonio College</td>
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<td>Hoggan, Lynda Smith (1996)</td>
<td>Biological Sciences</td>
<td>B.S., Slippery Rock University</td>
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<td>M.P.H., University of California, Los Angeles</td>
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<td>Hoover, Karelyn (1995)</td>
<td>Chemistry</td>
<td>B.S., M.S., New Mexico Institute of Mining &amp; Technology</td>
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<td>Commercial and Entertainment Arts</td>
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The Faculty

Mirman, David (2000)
Biological Sciences
B.A., University of Pennsylvania
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Muniz, Laura A. (2005)
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Munro, Matthew J. (1998)
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Ph.D., University of California, Los Angeles

Nitta, Akira (Art) (2006)
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Nixon, Bruce (1999)
Mental Health Technology
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B.A., M.A. University of California, Irvine
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Norton, Carol (1991)
Learning Assistance
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Director, Assessment & Matriculation
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Orj, Jondea (2004)
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M.S.N., University of Phoenix

Parker, Stacy (2001)
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Parra, Heidi R. (1992)
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B.S., B.A., M.S., California State University, Long Beach

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Computer Information Systems
B.S., California Polytechnic University, Pomona
M.Div. St. John’s Theologic Seminary

Peck, Herbert (2002)
Aircraft Maintenance & Manufacturing
A.A., Fullerton College

Pedersen, Kirk (1998)
Fine Arts
B.A., Midland College
M.A., San Francisco State University
M.F.A., Claremont Graduate School

Pelletier, John (1999)
Counseling, ESL
B.A., California Polytechnic University, Pomona
M.S., University of La Verne
M.A., Psy.D., California School of Professional Psychology

Perez, Anabel (2007)
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M.S., California State University, Long Beach

Perez-Garcia, Julie (1999)
Counseling
B.A., University of California, Santa Barbara
Ph.D., Washington State University

Perkins, Robert (2001)
Architecture & Engineering Design Technology
B.S.C.E., Princeton University
M.Arch., University of Colorado

Petersen, Craig A. (1981)
Biological Sciences
B.S., M.S., California State University, Los Angeles

Plesetz, Sarah (2008)
Nursing
A.S., Pomona College
A.A., Mt. San Antonio College
B.A., M.A., California State University, Pomona

Mathematics, Computer Science
B.A., University of Bucharest
M.S., University of Iowa
M.A., Ph.D., University of Southern California

Poulter, Shane (2007)
Counseling
B.S., M.S., California State University, Pomona
M.A., California State University, Dominguez Hills

Preciado, Rosa M. (1975)
Psychology, Education
B.A., A.A., Mt. San Antonio College
B.A., California State University, Fullerton
M.A., University of California, Riverside

Prochaska, Cynthia Adam (1990)
English, Literature & Journalism
B.A., M.A., University of California, Santa Barbara

Quinn, Barbara (2006)
Disabled Student Programs & Services
B.A., California State University, Fullerton
M.S.W., University of California, Los Angeles

English, Literature & Journalism
B.A., A.A., Mt. San Antonio College
B.A., M.A., California State Polytechnic University, Pomona

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Redinger, Larry L. (1975)
Dean, Natural Sciences
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