ABOUT THE COVER
The cover designs for this Catalog commemorate the 60th Anniversary and rich history of Mt. San Antonio College. Highlighted on the back is a time-zone contrast featuring Pete Reynolds, a member of Mt. SAC’s original graduating Class of 1947 and Alex Wu, who holds the distinction 60 years later as Mt. SAC’s 1 millionth student and a candidate for the Class of 2007. Just as we have over the past six decades, Mt. SAC remains committed to not only educational excellence, but extraordinary distinction as well.

ACKNOWLEDGMENTS
Much appreciation to the following individuals for their contributions to this Catalog:

Editors
Virginia Burley, Ph.D., Chief Editor
Clarence Brown
Marge Catulio
Jamaika Fowler
Carmen Parra
Linda Potter

Design & Production
Victoria A. Randall, Chief Designer
John M. Lewallen, Covers
Linda Lundgren, Opening Pages

Photographers
Mike Taylor, Chief Photographer
Roger Conard
Kirby Lee
Jason Hamilton

Printing
San Dieguito Printers

The Catalog is available in alternate formats (Braille, enlarged text, e-text, etc.) upon request. Please contact Disabled Student Programs & Services at (909) 594-5611, ext. 4290.
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 2006-07 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 91789-1399
(909) 594-5611
www.mtsac.edu
TTY# (909) 594-3447
(Hearing Impaired)
This 2006/07 College Catalog is being published in conjunction with the celebration of Mt. San Antonio College’s 60th Anniversary. For six decades, we have offered quality, affordable and accessible learning opportunities to over a million students in the San Gabriel Valley and other parts of California and the world.

I encourage you to use this Catalog as your planning and resource guide to explore the vast scope of opportunities, services and programs that Mt. SAC offers.

Whether you are pursuing one of our more than 200 degree and certificate programs or upgrading your job skills, we are fully committed to providing you quality instruction, support services and a first-rate learning environment to prepare you for the real world.

We provide excellent 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.

Over the past 60 years, Mt. SAC has become a “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 achievements and the distinction that both faculty and student efforts have brought to the College. I encourage you to read the testimonials posted on our website: www.mtsac.edu.

As we look toward the next 60 years, Mt. SAC will continue to value only one thing above excellence—and that’s distinction!

Christopher C. O’Hearn, Ph.D.
President/CEO
Table of Contents

Accreditation and Changes in this Catalog ................................................................. i
A Message from the President ..................................................................................... ii
Table of Contents ..................................................................................................... iii-v
College Calendar .................................................................................................... vi-viii
College Directory .................................................................................................... ix

SECTION 1 — The College
Mt. San Antonio College ............................................................................................ 1
History ....................................................................................................................... 1
Mission, Vision, and Values ...................................................................................... 1
College Foundation .................................................................................................. 1
College Organization ............................................................................................... 2-4

SECTION 2 — Matriculation
Admission and Registration .................................................................................... 6-8
Admissions ................................................................................................................ 6
Application to the College ....................................................................................... 6
Residency Requirements ........................................................................................... 6
College Starter Program ............................................................................................ 6
Evaluation of Other College Coursework ............................................................... 7
Acceptance of Domestic Coursework from Accredited Colleges
and Universities in the United States ....................................................................... 7
Articulation with High Schools, ROPs
and Adult Schools .................................................................................................. 7
Admission of International Students ..................................................................... 7
Registration ............................................................................................................. 7
Schedule of Classes ................................................................................................. 8
Enrollment Fees and Expenses ................................................................................ 8
Refund of Fees ......................................................................................................... 8
Cancelled Classes .................................................................................................... 8
Student Obligations ................................................................................................ 8
Assessment and Placement ...................................................................................... 8-9
Placement Tests ....................................................................................................... 8
Appeals Process ...................................................................................................... 9
Ability to Benefit .................................................................................................... 9

SECTION 3 — Academic Policies and Requirements
Attendance and Enrollment .................................................................................... 11
Attendance .............................................................................................................. 11
Auditing Courses ..................................................................................................... 11
Dropping Courses and Withdrawing from the College ......................................... 11
Student Unit Limits ................................................................................................. 11
Repeatable Courses ................................................................................................. 11
Repeating Courses Previously Passed ................................................................. 11
Petitions for Exceptional Action ............................................................................. 11
Limitations on Repeating Courses ......................................................................... 11

Credits and Grades ................................................................................................ 11-14
Definition of a Unit of Credit .................................................................................. 11
Classification of Students ...................................................................................... 11
Grading System ....................................................................................................... 11
Incomplete ................................................................................................................ 12
Final Examinations ................................................................................................. 12
Early Examinations ................................................................................................. 12
Credit/No Credit Grades ......................................................................................... 12
Credit by Examination ........................................................................................... 12
Advanced Placement Examination ...................................................................... 13
Credit for Extra Institutional Learning .................................................................. 13
Credit for Military Training .................................................................................... 14

Honors ..................................................................................................................... 14-15
Academic Honors .................................................................................................. 14
Graduation Honors ................................................................................................. 14
Honors Program ..................................................................................................... 14
Alpha Gamma Sigma .............................................................................................. 15
Phi Theta Kappa ..................................................................................................... 15

Academic Standards .............................................................................................. 15-16
Probation and Dismissal ......................................................................................... 15
Appeals Process ..................................................................................................... 16
<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Records</strong></td>
</tr>
<tr>
<td>Definition of Educational Record</td>
</tr>
<tr>
<td>Academic Renewal</td>
</tr>
<tr>
<td>Transcripts</td>
</tr>
<tr>
<td>Challenge of Educational Records</td>
</tr>
<tr>
<td><strong>SECTION 4 — Student Services and Student Life</strong></td>
</tr>
<tr>
<td>Student Services</td>
</tr>
<tr>
<td>Admissions and Records</td>
</tr>
<tr>
<td>Advising Center</td>
</tr>
<tr>
<td>Assessment Center</td>
</tr>
<tr>
<td>The Bridge Program</td>
</tr>
<tr>
<td>Bursar's Office and Photo ID</td>
</tr>
<tr>
<td>Career Counseling</td>
</tr>
<tr>
<td>Career Placement Services</td>
</tr>
<tr>
<td>Disabled Student Programs &amp; Services</td>
</tr>
<tr>
<td>Extended Opportunity Programs &amp; Services</td>
</tr>
<tr>
<td>Financial Aid</td>
</tr>
<tr>
<td>Health Services</td>
</tr>
<tr>
<td>International Student Programs</td>
</tr>
<tr>
<td>Re-Entry Services</td>
</tr>
<tr>
<td>Veterans' Affairs</td>
</tr>
<tr>
<td>Child Development Center</td>
</tr>
<tr>
<td>Escort Service</td>
</tr>
<tr>
<td>Student Life</td>
</tr>
<tr>
<td>Student Life Office</td>
</tr>
<tr>
<td>Student Life Center</td>
</tr>
<tr>
<td>Student Government</td>
</tr>
<tr>
<td>Campus Clubs and Organizations</td>
</tr>
<tr>
<td><strong>SECTION 5 — Instruction and Learning Resources</strong></td>
</tr>
<tr>
<td>Instruction</td>
</tr>
<tr>
<td>Distance Learning Program</td>
</tr>
<tr>
<td>Study Abroad Program</td>
</tr>
<tr>
<td>Work Experience Education</td>
</tr>
<tr>
<td>Library and Learning Resources</td>
</tr>
<tr>
<td>Learning Assistance Center</td>
</tr>
<tr>
<td>Library</td>
</tr>
<tr>
<td>Media Services</td>
</tr>
<tr>
<td>Computer Aided Graphics, Visual Arts and Design Programs</td>
</tr>
<tr>
<td><strong>SECTION 6 — Campus Facilities</strong></td>
</tr>
<tr>
<td>Campus Facilities</td>
</tr>
<tr>
<td>Art Gallery</td>
</tr>
<tr>
<td>Athletic Facilities</td>
</tr>
<tr>
<td>Auxiliary Services</td>
</tr>
<tr>
<td>Bookstore &quot;SacBookRac&quot;</td>
</tr>
<tr>
<td>Exercise Science/Wellness Center</td>
</tr>
<tr>
<td>Express Stop</td>
</tr>
<tr>
<td>Farm</td>
</tr>
<tr>
<td>Food Services</td>
</tr>
<tr>
<td>Mountie Stop</td>
</tr>
<tr>
<td>Performing Arts Center</td>
</tr>
<tr>
<td>Performing Arts Center Box Office</td>
</tr>
<tr>
<td>Planetarium</td>
</tr>
<tr>
<td>Radio Station and Cable TV Station</td>
</tr>
<tr>
<td>Wildlife Sanctuary</td>
</tr>
<tr>
<td><strong>SECTION 7 — Programs of Study Leading to a Certificate</strong></td>
</tr>
<tr>
<td>Programs of Study Leading to an Associate in Arts Degree</td>
</tr>
<tr>
<td>Graduation Requirements</td>
</tr>
<tr>
<td>Associate in Arts Degree (A.A.)</td>
</tr>
<tr>
<td>Associate in Science Degree (A.S.)</td>
</tr>
<tr>
<td>Programs of Study Leading to an Associate in Science Degree</td>
</tr>
<tr>
<td>Alphabetic Listing</td>
</tr>
<tr>
<td>Application for Graduation</td>
</tr>
<tr>
<td>Listing by Instructional Division</td>
</tr>
<tr>
<td>Multiple Degrees</td>
</tr>
<tr>
<td>Residency Requirement</td>
</tr>
<tr>
<td>General Education Requirements</td>
</tr>
<tr>
<td>Philosophy Statement</td>
</tr>
<tr>
<td>General Education Requirements for 2006-07</td>
</tr>
<tr>
<td>Associate in Science Degrees</td>
</tr>
<tr>
<td><strong>SECTION 8 — Programs of Study Leading to a Certificate</strong></td>
</tr>
<tr>
<td>Programs of Study Leading to a Certificate</td>
</tr>
<tr>
<td>Alphabetic Listing</td>
</tr>
<tr>
<td>Listing by Instructional Division</td>
</tr>
<tr>
<td>Certificates</td>
</tr>
</tbody>
</table>
2006-2007 College Calendar

**Fall 2006**

**June 5**  
International student application deadline for Fall 2006

**July 4**  
Independence Day—(campus closed)

**July 26 - August 23**  
Registration period for 2006 Fall Credit Classes

**August 14**  
Community Education Registration begins for Fall 2006

**August 27**  
Residency determination date

**August 28**  
Fall Semester begins

**September 1**  
Application period ends

**September 4**  
Labor Day—(campus closed)

**September 8**  
Last day to apply for refund for 16-week classes

**September 8**  
Last day to add a 16-week class

**September 19**  
Last day to withdraw without a “W” for 16-week classes

**September 29**  
Last day to change grading option for 16-week classes

**October 13**  
Last day to petition for Fall Semester and Winter Intersession graduation

**November 3**  
Last day to withdraw from Fall Semester for 16-week classes

**November 6**  
International student application due for Winter 2007 Intersession

**November 10**  
Veteran’s Day—(campus closed)

**November 23 - 26**  
Thanksgiving Recess—(campus closed)

**November 29**  
Registration begins for 2007 Winter Intersession and 2007 Spring Semester Credit Classes

**December 4**  
Community Education Registration begins for 2007 Winter Intersession and 2007 Spring Semester

**December 11 - 15**  
“Book Buy Back” at “SacBookRac”

**December 11 - 17**  
Final Exams—(see schedule in Mt. SAC Info Guide)

**December 17**  
Fall Semester ends
2006-2007 College Calendar

Winter 2007

November 6, 2006  International students application deadline for Spring 2007
November 29, 2006  Telephone & online registration begins for Winter and Spring 2007

January 3  Telephone & online registration ends for Winter 2007
January 8  Winter Intersession begins
January 8  International student application deadline for Spring 2007
January 15  Martin Luther King, Jr. Day—(campus closed)

February 16  Lincoln's Birthday—(campus closed)
February 18  Winter Intersession ends

Spring 2007

November 29, 2006  Telephone & online registration begins for Winter and Spring 2007

January 1 - 2  New Year's Holiday—(campus closed)
January 8  International student application deadline for Spring 2007

February 23  Flex/Staff Development Day
February 21  Telephone & online registration ends for Spring 2007
February 25  Residency determination date
February 26  Spring semester begins

March 2  Spring application period ends
March 9  Last day to apply for refund for 16-week classes
March 9  Last day to add a 16-week class
March 19  Last day to withdraw Without a “W” for 16-week classes
March 29  Last day to change grading option for a 16-week classes
March 30  Cesar Chavez Day of Observance—(classes in session)
2006-2007 College Calendar

Spring 2007 (continued)

April 13  Last day to petition for May 2007 Graduation
April 30  International student application deadline for Summer Session 2007

May 4   Last day to withdraw from Spring Semester
May 16 - June 20  Telephone and online registration for Summer 2007
May 28  Memorial Day—(campus closed)

June 11 - 17  Final Exams—(see schedule in Mt. SAC Info Guide)
June 15  Commencement
June 17  Spring semester ends

Summer 2007

April 30  International student application deadline for Summer 2007

May 16  Telephone & online registration begins for Summer 2007

June 18  International student application deadline for Fall 2007
June 20  Telephone & online registration ends for Summer 2007
June 25  Summer session begins

July 4  Independence Day—(campus closed)

August 5  Summer session ends
<table>
<thead>
<tr>
<th>Department</th>
<th>Phone Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Counselor for Student Athletes</strong></td>
<td>5929</td>
</tr>
<tr>
<td><strong>Academic Senate</strong></td>
<td>5436</td>
</tr>
<tr>
<td>* Accounting and Management</td>
<td>4909, 4910</td>
</tr>
<tr>
<td><strong>Advising Center</strong></td>
<td>4293</td>
</tr>
<tr>
<td><strong>Admissions and Records</strong></td>
<td>4415</td>
</tr>
<tr>
<td>* Aeronautics and Transportation</td>
<td>3098</td>
</tr>
<tr>
<td><strong>Affirmative Action</strong></td>
<td>4225</td>
</tr>
<tr>
<td>* Agricultural Sciences</td>
<td>4540</td>
</tr>
<tr>
<td>* Air Conditioning, &amp; Welding</td>
<td>5107, 4638</td>
</tr>
<tr>
<td>* Aircraft Maintenance &amp; Manufacturing</td>
<td>4762, 4768</td>
</tr>
<tr>
<td><strong>Alumni Association</strong></td>
<td>5443</td>
</tr>
<tr>
<td><strong>American Language</strong></td>
<td>3432</td>
</tr>
<tr>
<td><strong>Architecture and Design</strong></td>
<td>3908</td>
</tr>
<tr>
<td>* Art, Animation &amp; Broadcasting</td>
<td>5104</td>
</tr>
<tr>
<td>* Arts Division</td>
<td>5200</td>
</tr>
<tr>
<td><strong>Assessment Center</strong></td>
<td>4265</td>
</tr>
<tr>
<td><strong>Associated Students</strong></td>
<td>4528</td>
</tr>
<tr>
<td>* Athletics</td>
<td>4630</td>
</tr>
<tr>
<td>* Auxiliary Services</td>
<td>4470</td>
</tr>
<tr>
<td><strong>Biological Sciences</strong></td>
<td>4013</td>
</tr>
<tr>
<td><strong>Bookstore (SacBookRac)</strong></td>
<td>4475</td>
</tr>
<tr>
<td><strong>Bridge Programs</strong></td>
<td>6231</td>
</tr>
<tr>
<td><strong>Business Administration</strong></td>
<td>4612</td>
</tr>
<tr>
<td>* Business and Economic Development Division</td>
<td>4600</td>
</tr>
<tr>
<td><strong>Bursar’s Office</strong></td>
<td>4960</td>
</tr>
<tr>
<td><strong>Campus Café</strong></td>
<td>4105</td>
</tr>
<tr>
<td><strong>Campus Events</strong></td>
<td>4797</td>
</tr>
<tr>
<td><strong>Campus Security</strong></td>
<td>4555, 4299</td>
</tr>
<tr>
<td><strong>Career Placement</strong></td>
<td>4510</td>
</tr>
<tr>
<td><strong>Center of Excellence</strong></td>
<td>6106</td>
</tr>
<tr>
<td><strong>Chemistry</strong></td>
<td>4533</td>
</tr>
<tr>
<td><strong>Child Development Center</strong></td>
<td>(909) 598-2307, x4920</td>
</tr>
<tr>
<td><strong>Common Grounds Café</strong></td>
<td>4180</td>
</tr>
<tr>
<td>* Communication</td>
<td>6303</td>
</tr>
<tr>
<td>* Computer Information Systems</td>
<td>4720, 4719</td>
</tr>
<tr>
<td>* Community Education Division</td>
<td>4220</td>
</tr>
<tr>
<td><strong>Community Education Center</strong></td>
<td>4845</td>
</tr>
<tr>
<td><strong>Contract Education</strong></td>
<td>4210</td>
</tr>
<tr>
<td><strong>Counseling</strong></td>
<td>4380</td>
</tr>
<tr>
<td>* Dance</td>
<td>4742</td>
</tr>
<tr>
<td><strong>Disabled Student Programs and Services (DSP&amp;S)</strong></td>
<td>4290</td>
</tr>
<tr>
<td>* Earth Sciences and Astronomy</td>
<td>4148</td>
</tr>
<tr>
<td>* Electronics and Computer Technology</td>
<td>4821, 4723, 5614</td>
</tr>
<tr>
<td>* English, Literature &amp; Journalism</td>
<td>4706</td>
</tr>
<tr>
<td><strong>ESL and Intercultural Programs</strong></td>
<td>4736</td>
</tr>
<tr>
<td><strong>Exercise Science/Wellness Center</strong></td>
<td>4625</td>
</tr>
<tr>
<td><strong>Express Stop</strong></td>
<td>4141</td>
</tr>
<tr>
<td><strong>Extended Opportunity Programs and Services (EOPS)</strong></td>
<td>4500</td>
</tr>
<tr>
<td>* Family and Consumer Sciences</td>
<td>4633</td>
</tr>
<tr>
<td><strong>Farm Tours</strong></td>
<td>4794</td>
</tr>
<tr>
<td><strong>Financial Aid</strong></td>
<td>4450</td>
</tr>
<tr>
<td>* Fire Technology</td>
<td>5148</td>
</tr>
<tr>
<td><strong>Foundation Office</strong></td>
<td>4215</td>
</tr>
<tr>
<td>* Health Careers Resource Center</td>
<td>4788</td>
</tr>
<tr>
<td><strong>Health Center</strong></td>
<td>4400</td>
</tr>
<tr>
<td>* History, Geography, Political Science</td>
<td>4671</td>
</tr>
<tr>
<td>* Histotechnology</td>
<td>4884</td>
</tr>
<tr>
<td>* Honors Program</td>
<td>4665</td>
</tr>
<tr>
<td>* Humanities and Social Sciences Division</td>
<td>4570</td>
</tr>
<tr>
<td><strong>Information Technology</strong></td>
<td>4365</td>
</tr>
<tr>
<td><strong>Instruction Office</strong></td>
<td>4200</td>
</tr>
<tr>
<td><strong>KSAS Studio</strong></td>
<td>4678</td>
</tr>
<tr>
<td>* Language Learning Center</td>
<td>4580</td>
</tr>
<tr>
<td>* Learning Assistance Services</td>
<td>4300</td>
</tr>
<tr>
<td>* Learning Resources Division</td>
<td>5658</td>
</tr>
<tr>
<td><strong>Library</strong></td>
<td>4260</td>
</tr>
<tr>
<td><strong>Lost &amp; Found (Student Life)</strong></td>
<td>4525</td>
</tr>
<tr>
<td><strong>Marketing &amp; Communication Office</strong></td>
<td>4121</td>
</tr>
<tr>
<td>* Mathematics, Computer Sciences</td>
<td>4729, 4652</td>
</tr>
<tr>
<td>* Medical Services</td>
<td>4656</td>
</tr>
<tr>
<td>* Mental Health Technology</td>
<td>4916</td>
</tr>
<tr>
<td><strong>Mountie Grill</strong></td>
<td>4624</td>
</tr>
<tr>
<td><strong>Mountie Stop</strong></td>
<td>4497</td>
</tr>
<tr>
<td>* Music</td>
<td>4332</td>
</tr>
<tr>
<td>* Natural Sciences Division</td>
<td>4425</td>
</tr>
<tr>
<td>* Noncredit Programs</td>
<td>4220</td>
</tr>
<tr>
<td>* Nursing</td>
<td>4560</td>
</tr>
<tr>
<td>* Office Technology</td>
<td>4613</td>
</tr>
<tr>
<td><strong>Parking Office</strong></td>
<td>4233</td>
</tr>
<tr>
<td><strong>Parking Services Cashier</strong></td>
<td>4299</td>
</tr>
<tr>
<td>* Paralegal</td>
<td>3015</td>
</tr>
<tr>
<td><strong>Performing Arts Center Box Office</strong></td>
<td>(909) 468-4050, x2050</td>
</tr>
<tr>
<td>* Physical Education Division</td>
<td>4630</td>
</tr>
<tr>
<td>* Physical Therapy Aide</td>
<td>4750</td>
</tr>
<tr>
<td>* Physics, Engineering</td>
<td>4421</td>
</tr>
<tr>
<td><strong>Photographics</strong></td>
<td>4451</td>
</tr>
<tr>
<td><strong>Photo I.D.</strong></td>
<td>4960</td>
</tr>
<tr>
<td><strong>Planetarium Shows</strong></td>
<td>2050</td>
</tr>
<tr>
<td><strong>President &amp; Board of Trustees</strong></td>
<td>4250</td>
</tr>
<tr>
<td>* Psychology, Education</td>
<td>4282</td>
</tr>
<tr>
<td>* Psychiatric Technician</td>
<td>5130</td>
</tr>
<tr>
<td>* Public Services</td>
<td>4654</td>
</tr>
<tr>
<td>* Radiologic Technology</td>
<td>4680</td>
</tr>
<tr>
<td><strong>Re-Entry Center</strong></td>
<td>4392</td>
</tr>
<tr>
<td><strong>Regional Health Occupations Resource Center</strong></td>
<td>6101</td>
</tr>
<tr>
<td>* Registered Veterinary Technology</td>
<td>4544</td>
</tr>
<tr>
<td><strong>Registration</strong></td>
<td>4415</td>
</tr>
<tr>
<td><strong>Relays Office</strong></td>
<td>4840</td>
</tr>
<tr>
<td>* Respiratory Therapy</td>
<td>3930</td>
</tr>
<tr>
<td><strong>SacBookRac</strong></td>
<td>4475</td>
</tr>
<tr>
<td><strong>Security (Campus)</strong></td>
<td>4299, 4455</td>
</tr>
<tr>
<td>* Service Learning</td>
<td>4656</td>
</tr>
<tr>
<td>* Sign Language</td>
<td>4443</td>
</tr>
<tr>
<td><strong>Small Business Development Center</strong></td>
<td>(909) 629-2247</td>
</tr>
<tr>
<td>* Sociology, Philosophy</td>
<td>4591</td>
</tr>
<tr>
<td><strong>Stadium Ticket Office</strong></td>
<td>4880</td>
</tr>
<tr>
<td><strong>Student Center</strong></td>
<td>4528</td>
</tr>
<tr>
<td><strong>Student Life and Student Clubs</strong></td>
<td>4525</td>
</tr>
<tr>
<td><strong>Student Services, Dean of Students</strong></td>
<td>4525</td>
</tr>
<tr>
<td><strong>Student Services, V.P. Office</strong></td>
<td>4505</td>
</tr>
<tr>
<td>* Teacher Prep Institute</td>
<td>4190</td>
</tr>
<tr>
<td>* Technology and Health Division</td>
<td>4750</td>
</tr>
<tr>
<td>* Theater</td>
<td>4337</td>
</tr>
<tr>
<td><strong>Tutorial Services</strong></td>
<td>6605</td>
</tr>
<tr>
<td><strong>Upward Bound</strong></td>
<td>5634</td>
</tr>
<tr>
<td><strong>Veterans’ Service Center</strong></td>
<td>4520</td>
</tr>
<tr>
<td><strong>Wildlife Sanctuary Tours</strong></td>
<td>4794</td>
</tr>
</tbody>
</table>

* Instructional Programs and Departments
Section 1

The College
Mt. San Antonio College (Mt. SAC) is a public community college that offers a diversified educational program designed to prepare students for success in today's diverse economic professional, technical and cultural sectors. The objectives of the education program are to:

- prepare students for transfer to baccalaureate-level colleges and universities.
- increase vocational competence resulting in usable and marketable occupational skills.
- provide a general education emphasizing basic skills and appreciations.
- promote continuing education and lifelong learning.
- assist the student through guidance to know and develop his/her abilities in relation to his/her potential.
- provide community service and adult education.

The objectives of the education program are to:

- prepare students for transfer to baccalaureate-level colleges and universities.
- increase vocational competence resulting in usable and marketable occupational skills.
- provide a general education emphasizing basic skills and appreciations.
- promote continuing education and lifelong learning.
- assist the student through guidance to know and develop his/her abilities in relation to his/her potential.
- provide community service and adult education.

The College offers courses of study through a semester system. Each semester, Fall and Spring, is 16 weeks in length, while summer and winter sessions are 6 weeks long. Many courses are offered in an accelerated mode.

Instruction at Mt. SAC is organized under a divisional structure with departments within each division. At present, the College has eight (8) instructional divisions within which are 39 departments.

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

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 nearly 40,000. In 2006, Mt. SAC proudly celebrates 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

It is the mission of Mt. San Antonio College:

- to provide accessible and affordable quality learning opportunities in response to the needs and interests of individuals and organizations.
- to provide quality transfer, career, and lifelong learning programs that prepare students with the knowledge and skills needed for success in an interconnected world.
- to advance the State and region’s economic growth and global competitiveness through education, training, and services that contribute to continuous workforce improvement.

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.

Johanna Heundl (far right), a lifetime member of the Mt. SAC Foundation President’s Circle leadership giving group, presents one of many scholarships given at the College’s 2006 Scholarship Awards Ceremony. The Foundation contributed a record $120,000 in scholarships to deserving students in the past academic year and plans to double that amount in 2006-07 through a variety of fund-raising activities.
**The College**

### BOARD OF TRUSTEES
- President: Judy Chen Haggerty
- Vice President: Dr. Manuel Baca
- Clerk: Rosanne Bader
- Member: Fred Chyr
- Member: Dr. David K. Hall
- Student Trustee: Gisselle Regalado
- College President: Dr. Christopher C. O’Hearn

### ADMINISTRATION
#### Administrative Services

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President, Administrative Services</td>
<td>Michael Gregoryk</td>
</tr>
<tr>
<td>Administrative Director, Auxiliary Services</td>
<td>Jay Devers</td>
</tr>
<tr>
<td>Director, Auxiliary Services Accounting</td>
<td>Sid Young</td>
</tr>
<tr>
<td>Director, Bookstore</td>
<td>Suzanne Luetjen</td>
</tr>
<tr>
<td>Director, Bursar’s Office</td>
<td>Sheree Culross</td>
</tr>
<tr>
<td>Manager, Custodial Services</td>
<td>Luis Gracia</td>
</tr>
<tr>
<td>Director, Facilities Planning and Management</td>
<td>Gary Nellesen</td>
</tr>
<tr>
<td>Assistant Director, Facilities, Planning and Management</td>
<td>Becky Mitchell</td>
</tr>
<tr>
<td>Facilities Project Manager</td>
<td>Roger Sneed</td>
</tr>
<tr>
<td>Director, Fiscal Services</td>
<td>Linda Baldwin</td>
</tr>
<tr>
<td>Assistant Director, Fiscal Services</td>
<td>Rosa Royce</td>
</tr>
<tr>
<td>Director, Food Services/Satellite Operations</td>
<td>Becky Carr</td>
</tr>
<tr>
<td>Director, Grounds and Transportation</td>
<td>Carol Gundlach</td>
</tr>
<tr>
<td>Director, Maintenance</td>
<td>Kent Smith</td>
</tr>
<tr>
<td>Director, Payroll</td>
<td>Vacant</td>
</tr>
<tr>
<td>Director, Public Safety</td>
<td>Doug Evans</td>
</tr>
<tr>
<td>Assistant Director, Public Safety</td>
<td>Michael Montoya</td>
</tr>
<tr>
<td>Director, Purchasing</td>
<td>Margaret Young</td>
</tr>
<tr>
<td>Director, Safety, Health Benefits, &amp; Risk Management</td>
<td>Karen Saldana</td>
</tr>
</tbody>
</table>

#### Human Resources

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<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>
</tr>
</tbody>
</table>

#### Information and Educational Technology

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Technology Officer</td>
<td>Vacant</td>
</tr>
<tr>
<td>Director, College Information Systems and Project Manager</td>
<td>Sheryl Hullings</td>
</tr>
<tr>
<td>Director, User Support and Network Services</td>
<td>Dale Vickers</td>
</tr>
</tbody>
</table>

### ADMINISTRATION (continued)

#### President’s Office

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director, Marketing and Communication</td>
<td>Clarence “CB” Brown</td>
<td>4121</td>
</tr>
<tr>
<td>Director, Development and Foundation</td>
<td>Leslie Kerr</td>
<td></td>
</tr>
<tr>
<td>Coordinator, Alumni Relations/Special Events</td>
<td>Kari Virding</td>
<td></td>
</tr>
</tbody>
</table>

#### Instruction

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President, Instruction</td>
<td>Dr. John Nixon</td>
<td></td>
</tr>
<tr>
<td>Dean, Instructional Services</td>
<td>Dr. Virginia Burley</td>
<td></td>
</tr>
<tr>
<td>Dean, Arts Division</td>
<td>Dr. Susan Long</td>
<td></td>
</tr>
<tr>
<td>Dean, Business and Economic Development Division</td>
<td>Vacant</td>
<td></td>
</tr>
<tr>
<td>Interim Associate Dean, Business and Economic Development Division</td>
<td>Dr. Cheryl Marshall</td>
<td></td>
</tr>
<tr>
<td>Director, Child Development Center</td>
<td>Janette Henry</td>
<td></td>
</tr>
<tr>
<td>Dean, Humanities and Social Sciences Division</td>
<td>Dr. Stephen A. Runnebohm</td>
<td></td>
</tr>
<tr>
<td>Associate Dean, Humanities and Social Sciences Division</td>
<td>James Jenkins</td>
<td></td>
</tr>
<tr>
<td>Dean, Library and Learning Resources Division</td>
<td>Kerry Stern</td>
<td></td>
</tr>
<tr>
<td>Director, Learning Assistance Center</td>
<td>Meghan Chen</td>
<td></td>
</tr>
<tr>
<td>Director, Technical Services/Learning Resources</td>
<td>Bill Eastham</td>
<td></td>
</tr>
<tr>
<td>Dean, Natural Sciences Division</td>
<td>Larry Redinger</td>
<td></td>
</tr>
<tr>
<td>Associate Dean, Natural Sciences Division</td>
<td>Dr. Deborah Boroch</td>
<td></td>
</tr>
<tr>
<td>Dean, Physical Education Division</td>
<td>Deborah Blackmore</td>
<td></td>
</tr>
<tr>
<td>Director, Physical Education/Wellness Programs</td>
<td>Joe Jemm</td>
<td></td>
</tr>
<tr>
<td>Director, Mt. SAC Relays</td>
<td>Scott Davis</td>
<td></td>
</tr>
<tr>
<td>Dean, Technology and Health Division</td>
<td>John Heneise</td>
<td></td>
</tr>
<tr>
<td>Associate Dean, Technology and Health Division</td>
<td>Dr. Sarah Daum</td>
<td></td>
</tr>
<tr>
<td>Director, Nursing Program</td>
<td>Clarence Edwards</td>
<td></td>
</tr>
<tr>
<td>Assistant Vice President, Community Education</td>
<td>Barbara Crane</td>
<td></td>
</tr>
<tr>
<td>Director, Basic Skills</td>
<td>Madelyn Arballo</td>
<td></td>
</tr>
<tr>
<td>Director, Community Education &amp; Contract Training</td>
<td>Gary Kay</td>
<td></td>
</tr>
<tr>
<td>Director, ESL and Intercultural Programs</td>
<td>Donna Burns</td>
<td></td>
</tr>
<tr>
<td>Assistant Director, ESL and Intercultural Programs</td>
<td>Liza Becker</td>
<td></td>
</tr>
<tr>
<td>Coordinator, ESL Curriculum and Assessment</td>
<td>Margaret Teske</td>
<td></td>
</tr>
<tr>
<td>Director, Grants</td>
<td>Adrienne Price</td>
<td></td>
</tr>
<tr>
<td>Director, Research and Institutional Effectiveness</td>
<td>Barbara McNieice-Stallard</td>
<td></td>
</tr>
</tbody>
</table>

#### Student Services

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President, Student Services</td>
<td>Dr. Audrey Yamagata-Noji</td>
<td></td>
</tr>
<tr>
<td>Dean, Counseling</td>
<td>Raul Rodriguez</td>
<td></td>
</tr>
<tr>
<td>Associate Dean, Counseling</td>
<td>Thomas Mauch</td>
<td></td>
</tr>
<tr>
<td>Dean, Student Services</td>
<td>Carolyn Mauch</td>
<td></td>
</tr>
<tr>
<td>Director, Admissions and Records</td>
<td>James Ocampo</td>
<td></td>
</tr>
<tr>
<td>Assistant Director, Admissions and Records</td>
<td>Patricia Montoya</td>
<td></td>
</tr>
<tr>
<td>Director, Upward Bound</td>
<td>Juan Carlos Astorga</td>
<td></td>
</tr>
<tr>
<td>CalWorks/CARE Coordinator</td>
<td>Dora Lozano</td>
<td></td>
</tr>
</tbody>
</table>

---

**2006-07 Mt. San Antonio College Catalog**
INSTRUCTIONAL DIVISIONS

**Arts Division**

*Ext. 5200*

**Dr. Susan Long, Dean**

The Arts Division is comprised of four departments: Art/Animation, Music, Photographics, and Theater. The division sponsors numerous award-winning performance groups, houses an art gallery, and includes studio arts as well as digital arts and radio and television programs. The division sponsors student drama and music productions in the Performing Arts Center, oversees the animation and radio and television certificate programs, and monitors the college radio station, KSAK, as well as vocational degrees and certificates in Photography, Computer Graphics and Design for Interactive Visual Media. The division has performing groups that have competed internationally and have established top national and international ranking. For information relating to departments, programs, or events, contact the division office at ext. 5200.

**Business and Economic Development Division**

*Ext. 4600*

**Dean (vacant)**

**Dr. Cheryl Marshall, Interim Associate Dean**

Business and Economic Development is comprised of five educational departments, three Economic Development programs, and one service area. The educational departments are: Accounting and Management, Business Administration (Paralegal Studies, Marketing, Sales, Real Estate and Economics), Computer Information Systems (Programming, Networking and Security), Family and Consumer Sciences (Child Development, Fashion Merchandising and Design, Interior Design, Nutrition and Food Sciences, Hospitality and Restaurant Management), and Office Technology. For additional information, contact the division at ext. 4600.

The Economic Development programs are: Small Business Development Center, Center of Excellence, and Contract Education South, EdNet. For additional information, contact specific offices listed below.

The division also includes the services of the Child Development Center. The division's programs and services are designed to insure high quality education delivered in up-to-date facilities, meeting job requirements and the needs of the community.

**Economic Development Directors**

- Center of Excellence .......................... Audrey Reille, Ext. 6106
- Contract Education South .................. Scott Hammer, 909-628-5748
- Small Business Development Center ------- Mike Brady, 909-629-2247

**Community Education Division**

*Ext. 4220*

**Barbara Crane, Assistant Vice President**

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**

*Ext. 4570*

**Dr. Stephen Runnebohm, Dean**

**James Jenkins, Associate Dean**

The Humanities and Social Sciences Division is comprised 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 and a successful study abroad program. For additional information, contact the division at ext. 4570.

**Library and Learning Resources Division**

*Ext. 4260*

**Kerry C. Stern, Dean**

**Meghan Chen, Director, Learning Assistance Center**

**Bill Eastham, Director Technical Services**

The Library and Learning Resources Division includes Broadcast Operations, Event Services, Learning Assistance, Learning Lab, Library, Media Services, Professional and Organizational Development, 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 ........................................... Ext. 4260
- Media Services .................................. Ext. 4270
- Professional and Organizational Development .......................... Ext. 4504
- Technical Services .................................. Ext. 4799
- Tutoring ........................................... Ext. 6605
INSTRUCTIONAL DIVISIONS (continued)

Natural Sciences Division Ext. 4425
Larry L. Redinger, Dean
Dr. Deborah Boroch, Associate Dean

The Natural Sciences Division provides a wide variety of diverse educational opportunities and programs within its five departments: Agricultural Sciences; Biological Sciences; Chemistry; Earth Sciences, and Astronomy; Mathematics and Computer Science; and Physics and Engineering.

Agricultural Sciences provides numerous vocational programs leading to an Associate Degree or Certificate including programs in Animal Science, Equipment Technology, Registered Veterinary Technology, and Ornamental Horticulture. Biological Sciences offers a variety of courses for both majors and non-majors, including specific programs in Anatomy and Physiology, Anthropology, Histotechnology, Microbiology, Botany, and Zoology. Chemistry offers a full range of lower-division courses, including introductory, general, and organic chemistry. Earth Sciences and Astronomy provide course work in geology, oceanography, meteorology and astronomy. Mathematics and Computer Sciences provide courses for students at all levels of computational ability, from pre-algebra to calculus and differential equations. Physics and Engineering offers several course sequences in classical physics, as well as courses in Physical Science. The Engineering program provides a solid foundation of lower-division courses for those students preparing to transfer to a baccalaureate-level institution. For additional information, contact the division at ext. 4425.

Physical Education Division Ext. 4630
Deborah Blackmore, Dean/Athletic Director
Joe Jennum, Director/Physical Education and Wellness Programs

Mt. San Antonio College (Mt. SAC) 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, bringing millions of dollars into the local economy.

Technology and Health Division Ext. 4750
John Heneise, Dean
Dr. Sarah Daum, Associate Dean

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 Associates 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 CAD, Electronics Technology, Travel, Water Technology, and Welding. The Public Services Programs include 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). For additional information, contact the division at ext. 4750.

Department
Regional Health Occupations Resource Center Dr. Jesus Oliva, Ext. 6108
Matriculation Services:
Admissions and Registration
Assessment and Placement
Orientation
Counseling/Advisement

Section 2
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 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
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 child 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.

College Starter Program
The College Starter Program is designed for gifted high school juniors and seniors 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 average
4. Meet all course prerequisites
5. Students with a high school grade point average between 2.0 and 2.9 will be allowed to enroll in a single course. Students wishing to enroll in two courses must have a 3.0 grade point average or above.

Only college level courses may be taken as part of the College Starter Program. Students may not enroll in a course to make-up a high school course deficiency.

Special Admit Program
The Special Admit program is designed for gifted students enrolled in the 10th or earlier grades. The program is designed to provide an enrichment experience providing course opportunities not available as part of their school’s curriculum. 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 B average/3.0 cumulative school grade point average
4. Meet all course prerequisites
5. Take the Mt. SAC placement test in English and Reading

Only college level (degree appropriate and/or UC/CSU transferable) courses may be taken as part of the College Starter Program or Special Admit Program. Students may not enroll in a course to make-up a high school course deficiency.

* 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.
Students participating in either program will receive college credit that will become part of their permanent college record. High school credit may be possible at the discretion of the receiving high school.

**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. These course units will, at a minimum, be granted “elective credit” status.

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 graduation 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**

School District, Adult Education, and Regional Occupational Program (ROP) teacher will make students aware of the procedures for obtaining advanced placement and/or credit by examination at Mt. San Antonio College in an articulated program.

Students must request a 2+2 Articulation Credit form from their High School, ROP, Adult School, or Tech Prep office.

Students will complete a 2+2 Articulation Credit form and have the form certified by the appropriate instructor from their school program. Students requesting Articulation Credit will complete a College Starter Program application and attach their high school transcript.

At the conclusion of the High School, ROP, or Adult School course, students must submit the completed 2+2 Articulation Credit form, application, and transcript (for Articulation Credit) to the Tech Prep office at Mt. San Antonio College.

If the course work has been satisfactorily met, the subject area department chair will complete the Request for Articulation Equivalency form and check the box marked variance. Students seeking credit through the articulation process are required to take an exam. If the exam requirement has been satisfactorily met, the subject area department chair will complete the Request for Articulation Equivalency form and check the box marked credit.

Upon receipt of the 2+2 Articulation Credit form (plus application and student transcript for Articulation Credit), the Tech Prep office will prepare the Request for Articulation Equivalency form and forward it to the appropriate department. Once the form is completed and returned to the Tech Prep office, the student will be notified of advance placement or credit standing. Students who are granted credit will receive an unofficial transcript.

Articulation agreements and subject area competencies are updated annually.

College credit issued by ROP and/or Adult Education centers will be accepted if the issuing program 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).

**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
- 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.
- Transcripts from high school and/or college attended
- TB (tuberculosis) test
- Proof of health insurance (prior to registration)

The following items are required for current F-1 Visa students transferring into Mt. SAC:

- Copy of I-20
- Copy of I-94
- Transfer form

The deadlines to apply for the 2006-07 school year are as follows:

- Summer 2006 — First Monday of April
- Fall 2006 — First Monday of June
- Winter/Spring 2007 — First Monday of November

F-1 Visa students can obtain all application materials from our College Website at [www.mtsac.edu](http://www.mtsac.edu). From the Mt. SAC home page, click on “Apply or Register,” click on “Forms and Publications,” then click on “Application for International Students.” TOEFL scores, admissions 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.

**Registration**

Registration for classes is done online via the web at [http://my.mtsac.edu](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 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, a Student Activities Fee, a 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 other 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 (if paying by credit card) 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 18 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
- Health Services Fee
- Parking Fee
- Course Materials Fee

NO REFUNDS will be granted after the second week of the semester, except refunds for non-resident tuition which will be pro-rated accordingly, military withdrawal, and classes cancelled by the College.

- Non-Resident Tuition Fee: If students who have paid tuition withdraw from the College or reduce their program load, they should apply immediately at the Bursar’s Office for a fee refund. The amount of the refund will depend upon when the Request for Fee Refund form is submitted and will be pro-rated accordingly.

- 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 $20 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) reading test 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, a test may be repeated prior to the three-month limit.

Placement 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 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 Department of Education. Testing is conducted at the Assessment Center. For further information regarding Ability to Benefit regulations, contact the Financial Aid Office.

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 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 in the Counseling Center 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.

Students are exempt from Matriculation requirements if they are:
A. enrolled in Community Services classes only;
B. graduates with an Associate or advanced degree from an accredited institution; or
C. registering only in general interest classes.

Exemption from matriculation does not preclude the requirement to meet course prerequisites which may include assessment.

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.

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 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 prerequisites or corequisites have been met must be evaluated prior to registration.

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.
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. To determine whether a course is repeatable, refer to Section 10, Course Descriptions, in this Catalog.

Repeating 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 one time. On repetition, the second or latest grade will count toward the grade point average and the previous grade will be discounted or “forgotten.” 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.

Students shall be allowed a maximum of two withdrawals for a given course where a mark of “W” is posted for both withdrawals. To re-enroll in the course, students must submit a Petition to Re-enroll in a Course after Withdrawal. The petitions are available in department offices and division offices. Students who petition and are approved will have one additional opportunity to re-enroll and successfully complete the course.

Students who believe they have exceptional circumstances can seek a waiver to repeat a class an additional time through the division or department office pertaining to the specific course. Participation in an intervention program may be required.

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 hour.” 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 records.
**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 commencing 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 re-apply for admission within one semester of completion of the class. The grading option may not be changed at a later date. No-Credit grades will be considered in probation and dismissal procedures.

**IP — In Progress:** The “IP” symbol shall be used to denote that the class extends beyond the normal end of an academic term. It indicates that work is “in progress,” but that assignment of a substantive grade must await its completion. The “IP” symbol shall remain on the student’s permanent record in order to satisfy enrollment documentation. The appropriate evaluative grade and unit credit shall be assigned and appear on the student’s record for the term in which the course is completed.

**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. No 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. The “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. 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, 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 intent 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-entry/open-exit course. In any short-term course of less than six weeks, students must determine their grading option at the time of registration.

Credit toward graduation by using Credit/No Credit classes is limited to a maximum of 16 units. Courses taken for Credit/No Credit are not counted in calculating grade point average, nor in determining eligibility for the Dean’s List, but such courses are considered in probation and dismissal procedures.

Students are cautioned that upon transfer to baccalaureate institutions, “NC” grades typically are considered to be “F” grades.

## 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.
Academic Policies and Requirements

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, the Counseling Department, or the Advising Center.

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.

<table>
<thead>
<tr>
<th>AP Subject</th>
<th>Number of Units Applicable to General Education–Breadth Requirements for Students Obtaining Full or Subject-Area Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art: History of Art</td>
<td>3 semester units toward Area C1</td>
</tr>
<tr>
<td>Biology</td>
<td>3 semester units toward Area B2</td>
</tr>
<tr>
<td>Chemistry</td>
<td>6 semester units toward Areas B1 and B3</td>
</tr>
<tr>
<td>Economics: Macroeconomics</td>
<td>3 semester units toward Area D2</td>
</tr>
<tr>
<td>Economics: Microeconomics</td>
<td>3 semester units toward Area D2</td>
</tr>
<tr>
<td>English: English Language &amp; Composition</td>
<td>3 semester units toward Area A2</td>
</tr>
<tr>
<td>English: English Literature &amp; Composition</td>
<td>6 semester units toward Areas A2 and C2</td>
</tr>
<tr>
<td>French: French Language</td>
<td>6 semester units toward Area C2</td>
</tr>
<tr>
<td>German Language</td>
<td>6 semester units toward Area C2</td>
</tr>
<tr>
<td>Government and Politics: United States</td>
<td>3 semester units toward Area D8</td>
</tr>
<tr>
<td>Government and Politics: Comparative</td>
<td>3 semester units toward Area D8</td>
</tr>
<tr>
<td>History: European History</td>
<td>3 semester units toward Area D6</td>
</tr>
<tr>
<td>History: United States History</td>
<td>3 semester units toward Area D6</td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>3 semester units toward Area C2</td>
</tr>
<tr>
<td>Latin: Latin Literature</td>
<td>3 semester units toward Area C2</td>
</tr>
<tr>
<td>Mathematics: Calculus AB</td>
<td>3 semester units toward Area A4</td>
</tr>
<tr>
<td>Mathematics: Calculus BC</td>
<td>3 semester units toward Area B4</td>
</tr>
<tr>
<td>Music Theory</td>
<td>3 semester units toward Area C1</td>
</tr>
<tr>
<td>Physics B</td>
<td>6 semester units toward Areas B1 and B3</td>
</tr>
<tr>
<td>Physics C (mechanics)</td>
<td>3 semester units toward Areas B1 and B3</td>
</tr>
<tr>
<td>Physics C (electricity and magnetism)</td>
<td>3 semester units toward Areas B1 and B3</td>
</tr>
<tr>
<td>Psychology</td>
<td>3 semester units toward Area D9</td>
</tr>
<tr>
<td>Spanish: Spanish Language</td>
<td>6 semester units toward Area C2</td>
</tr>
<tr>
<td>Spanish: Spanish Literature</td>
<td>6 semester units toward Area C2</td>
</tr>
<tr>
<td>Statistics</td>
<td>3 semester units toward Area B4</td>
</tr>
</tbody>
</table>

Both UC and CSU stipulate that IB students who complete an IB diploma are eligible to receive 30 units of credit towards 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.
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 D2</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>English</td>
<td>5 semester units toward Area A1</td>
</tr>
<tr>
<td>French</td>
<td>5 semester units toward Area C2</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 C2</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>
<tr>
<td>Computer Science</td>
<td>NA</td>
</tr>
<tr>
<td>Classical Languages</td>
<td>5 semester units toward Area C2</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5 semester units toward Area B1</td>
</tr>
<tr>
<td>Business Management</td>
<td>NA</td>
</tr>
<tr>
<td>Biology</td>
<td>5 semester units toward Area B2</td>
</tr>
<tr>
<td>Design Technology</td>
<td>NA</td>
</tr>
<tr>
<td>Economics</td>
<td>5 semester units toward Area D2</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>English</td>
<td>5 semester units toward Area A1</td>
</tr>
<tr>
<td>French</td>
<td>5 semester units toward Area C2</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 C2</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>

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 guidance 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.

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 between 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, UCLA, 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 Program Graduate” 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 Dean of Instruction at Ext. 5463 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 G.P.A 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, while enrolled at Mt. San Antonio College has:

1. attempted at least 12 units, and
2. earned a cumulative grade point average below 2.00.

A student will be cleared from Academic Probation when the student's cumulative grade point average at Mt. San Antonio College is 2.00 or higher.

**Progress Probation**

A student is placed on Progress Probation when the student's cumulative grade point average at Mt. San Antonio College is 2.00 or higher.

**Probation Level 1 (L1)**

1. academic probation — When the student's cumulative grade point average at Mt. San Antonio College is 2.00 or higher, the student shall be cleared from Academic Probation.
2. progress probation — A student will be cleared from Progress Probation when the student's cumulative number of units of “A,” “B,” “C,” “D,” or “CR” reaches or exceeds the cumulative number of units of “W,” “I,” and “NC.”

**Reinstatement After Dismissal**

1. Probation Level 3 (Dismissal) — a dismissed student may apply for reinstatement after an interval of one regular semester of absence from Mt. San Antonio College. The student must meet with a counselor to be reinstated and to determine the number of units in which the student will be permitted to enroll.
Academic Policies and Requirements

2. **Probation Level 4 (Subsequent Dismissal)** — a subsequently dismissed student may apply for reinstatement after an absence from Mt. San Antonio College of two years or four regular semesters. Petitions shall be submitted to a counselor with verification of remedial work, or evidence of readiness to do successful college work. The counselor determines the number of units in which the student may enroll.

A reinstated student (from Probation 3 or Probation 4) must earn a semester grade point average of at least 2.00 and complete at least one-half of all units attempted in each semester after reinstatement at Mt. San Antonio College. The reinstated student remains on a probationary, reinstated status until the student has achieved a cumulative grade point average of at least 2.00 and has earned at least as many cumulative units of "A," "B," "C," "D," or "CR" as units of "W," "I," or "NC."

**Appeals Process**

Students with unique and extenuating circumstances which they believe warrant an exception to Mt. San Antonio College regulations and policies may file a Petition for Exceptional Action. Petitions are available in the offices of Admissions and Records, Counseling, Student Life, and Vice President of Student Services.

Students who have clearly documented extenuating circumstances may appeal decisions made at the department level by requesting a review by the College’s Board of Appeals.

**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](http://my.mtsac.edu).

**Challenge of Educational Records**

1. Any student may file a written request with the Records Officer of the District (Director, Admissions and Records) 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 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 Director, Admissions and Records, the student may, within thirty (30) days, appeal the decision to the Board of Trustees.

3. Grades assigned by an instructor to indicate the student’s performance in a course are not in contest, unless they were assigned by mistake, fraud, bad faith, or incompetency. (Education Code 76224)
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 roll sheets 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).

Advising Center
Student Services, Ext. 4293
The Advising Center offers a variety of transfer support services including:

- a library of college and university catalogs
- opportunities to meet with university representatives
- a complimentary copy of student transcripts
- computerized course articulation
- scholarship and career information

Students can schedule campus tours or request information on any of Mt. San Antonio College’s programs and services. Educational advisors are also available to provide guidance information on transfer preparation, certificate programs, graduation requirements and College policies and regulations.

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 Academy and/or the Freshman Experience.

Bursar’s Office and Photo ID, Ext. 4960
The Bursar's Office, located on the lower level of the Student Services Center, is responsible for the collection of credit registration fees and other campus fees including parking permits, transcripts, enrollment verification, production cards and malpractice insurance. The office also processes photo ID cards and refunds credit classes.

CalWORKs (California Work Opportunities and Responsibility to Kids), Ext. 4755
(See Extended Opportunity Programs and Services – EOPS)

Counseling Center
Student Services Center, Ext. 4380
The Counseling Center provides students with the educational, vocational and personal support needed to complete their educational goal. It is staffed by professional counselors who assist students with issues that might affect their education progress. Services offered include:

- career counseling and decision making
- career and personality testing and interpretation
- major selection and counseling to prepare for transfer to a four-year institution
- orientation of new students to the college
- evaluating academic skills and college preparedness, especially for those students experiencing academic difficulties
- counseling for personal issues and concerns

New students are required to participate in an orientation session with counselors. Students with associate degrees or higher are exempt. Undecided and new students are encouraged to enroll in Counseling classes during their first year of enrollment at the college.

Career Placement Services
Student Services Center, Ext. 4510
The Career Placement department helps students and graduates to secure part-time and full-time employment in order to help them 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.
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. While applying for the placard the student may obtain a special parking permit from DSP&S at no extra cost. This permit must be displayed in addition to the student parking permit which must be purchased. The special parking permit from DSP&S is valid for only one semester.

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-limited space (without having to observe the time limit specified). Please ensure that the placard or license plate is displayed properly. DSP&S highly recommends that students visit our department to determine if there are any other services that may be of assistance while attending Mt. San Antonio College.

No exceptions will be made for special parking privileges. A citation and fine will result if these guidelines are not followed. Questions should be directed to DSP&S, Ext. 4290 or Parking and Security, ext. 4555 (after 4:30 p.m., Ext. 4299).

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.

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. Current information as well as application forms are available in the Financial Aid Office.

Financial Aid seminars are available to assist students with information about the application process. Contact the Financial Aid Office for information on scheduled seminars.

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 that has been approved by the Department of Education and is administered at the Assessment Center in the Student Services Center.
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.
Student Services and Student Life

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

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

Students eligible for financial aid typically receive a “package” of aid from two or more of the financial aid programs.

Mt. SAC will determine the amount of federal financial aid that a student has earned in accordance with federal law. Recipients of federal programs are subject to the Return of Title IV funds requirements.

Students who receive federal financial aid and do not attend any classes will be required to repay any unearned financial aid they have received. At Mt. SAC a student’s withdrawal date is:

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

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

In addition, the College participates in the California Community College Board of Governors’ Fee Waiver program. This 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, or classes will be dropped. There are three methods to qualify: (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.

Information about the College Scholarship Program can be obtained in the Financial Aid Office.

Health Services (Building 67B)

Student Services Center, Ext. 4400

Medical, personal counseling, nursing, and health education services are provided. Professional health services are provided primarily on an appointment basis. Additional services include laboratory tests, tuberculosis screening, limited prescription medications, immunizations, pregnancy testing, and referrals. First aid services are provided for all students, employees and guests of the College. Please call for an appointment.

International Student Programs

Student Services Center, Ext. 4415

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 and Financial Aid 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.
- Access to special programs.
- Opportunity to work in teams to achieve their success.
- 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’ Affairs

Student Services Center, Ext. 4520

Veterans’ Affairs, 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.

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 veteran or dependent has the responsibility to adhere to these standards of attendance and progress and to notify the Veterans’ Affairs Office of any change in status that would affect the collecting of veterans’ 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 Veteran’s 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 low-income eligible student/parents 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 low-income eligible student/parents. There may be a minimum daily fee for this program depending on the family’s gross monthly income.

Fee Program
Children not qualified or accepted for State Preschool or General Childcare Funding 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.

 Escort Service, Ext. 4233
Mt. San Antonio College offers an evening 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 Service, 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 social, club, leadership, and personal growth and development experiences.

Student Life Office/Student Center Building 9C, Ext. 4525
The Student Life Office provides a variety of services offering assistance to students and staff. Forms for planning an event or activity, locating lost items, contacting students in emergency situations and giving information regarding clubs and opportunities for on-campus involvement are available in Student Life. This office also approves and enforces all on-campus posting.

The Student Life Office also assists students in compiling their Activities Transcript which denotes all extra curricular activities. This transcript is sent in conjunction with a student’s academic transcript and helps verify the student’s involvement in activities outside 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 Public Safety calls regarding disciplinary issues and advises faculty and staff on issues relating to discipline.

The Executive Offices of the Associated Students are located here as well as the club mailboxes.

STUDENT LIFE
Student Services and Student Life

Student Life Center
Building 9C, Ext. 4528
The Student Center, located in Building 9C, serves as the focal point for student activities and programs. The Center creates a supportive and relaxing environment where students can interact with one another along with staff and faculty. The Student Center serves as a meeting place for social functions, activities, lectures, clubs, and student government. The Center offers activities, games, and a relaxing place to do homework or watch television. The Center is the place to find information about off-campus housing.

Student Government
Building 9C, Room 1, Ext. 4525
Student Government is recognized as the official student voice on all College issues. There are 20 Senate positions available to students interested in becoming involved in the governance of the College. The Senate allocates monies to support various College programs, events, and services. Associated Students (A.S.) meetings are held every Tuesday and Thursday in the Student Center, Building 9C, Room 5 from 2:00 p.m. - 4:00 p.m. There are many other opportunities to influence College policies by serving on College-wide committees. Contact the Student Life Office at Ext. 4525 for more information.

Campus Clubs and Organizations
Building 9C, Room 1, Ext. 4525
Interested in joining a club or organization? Student Life is the place! There are over 40 opportunities for students to join a variety of clubs: cultural, religious, vocational, general interest, or special needs. We welcome new ideas for club involvement. The Inter-Club Council (I.C.C.) meets weekly on Mondays at Noon with a representative from each active club sharing ideas, formulating procedures and seeking ways to better serve the College and the community. Contact the Student Life Office at Ext. 4525 for more information.
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 email 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 or email to kstern@mtsac.edu.

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 (CCIE) 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 15, Room 17A.

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.

Humanities/Social Sciences Computer Lab, Building 26D, Rooms 102, 104, 106

The Humanities/Social Sciences Computer Center offers free services to all students taking course in the Humanities and Social Science Division. There are three adjacent labs, each with a different function. The Humanities Computer Center (HCC) is a writing lab that students can use to word process their papers. Students can also create PowerPoint presentations in this facility. The main purpose of the Humanities Internet lab (HIL) is to provide Internet access. Students can research their papers using the library database, telecommunicate with instructors through email, participate in chat rooms, as well as scan documents, burn CDs, print in color, and use word processing and PowerPoint. Finally, the Writing/Reading Assistance Center (WRAC) has a great selection of grammar software to help students improve their English skills. All three labs also have tutors and an English instructor on duty who can help students in a variety of subjects.

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 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 email, to view multimedia programs, to use word processing, to develop multimedia research projects, and to supplement classroom activities through computer-assisted instruction.
Instruction and Learning Resources

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 videos available for student viewing. Students must view the videos in the Media Services center. The media materials are not available for student check-out. Viewing rooms are available on a first-come first-serve basis.

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

<table>
<thead>
<tr>
<th>Architectural Technology</th>
<th>A.S. Degree &amp; Certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prime Focus:</strong> 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.</td>
<td></td>
</tr>
<tr>
<td><strong>Job Market:</strong> Career opportunities include Architect, Architectural Designer, Drafter, CADD Operator, Model Builder, and Illustrator. (See Sections 7 and 8)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engineering Design Technology</th>
<th>A.S. Degree &amp; Certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prime Focus:</strong> 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.</td>
<td></td>
</tr>
<tr>
<td><strong>Job Market:</strong> 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)</td>
<td></td>
</tr>
</tbody>
</table>

### COMPUTER INFORMATION SYSTEMS DEPARTMENT

<table>
<thead>
<tr>
<th>Computer Information Systems</th>
<th>A.S. Degree &amp; Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prime Focus:</strong> The curriculum of the CIS program covers such areas as basic computer literacy, microcomputer applications, the Internet, telecommunications, program development, computer networks, and operating systems. Program development incorporates creating graphical interfaces, client/server applications, object-oriented programming techniques, and web based applications. Course offerings include beginning and advanced relational database design on microcomputers and IBM AS/400 I series mid-range systems, systems analysis and design, and computer operations. 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.</td>
<td></td>
</tr>
<tr>
<td><strong>Job Market:</strong> Mt. SAC offers many computer courses, majors, and certificates in areas related to computer graphics and design. 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 for specific lower division requirements should consult the catalog of the school to which they plan to transfer for specific lower division requirements.</td>
<td></td>
</tr>
</tbody>
</table>
### Departments offering programs in computer graphics and design are:
- Architecture and Design Department
- Art Department
- Office Technology Department
- Photography Department (PhotoGraphics)

#### 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 for specific lower division requirements 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

#### Job Market:

### Electronics & Computer Technology Department

#### Electronics and Computer Engineering Technology

**Prime Focus:** The Electronics Technology Programs prepare the student for a career as an electronic technician in manufacturing and service-based electronic and computer companies. Several computer-based courses are included in the program curricula.

**Job Market:** Career opportunities include Service Technician, Production Technician, Engineering Technician, Electronics Communication Technician, Computer Repair Technician, Networking Technician, and Assembler. *(See Sections 7 and 8)*

### Mathematics Department

#### Computer Science/Mathematics

**Prime Focus:** Offers a full range of introductory to advanced courses in Computer Science, from fundamentals to data structures and algorithms. A variety of courses in Computer Science theory, as well as programming languages such as C/C++, Fortran, Pascal and Assembly prepare students for a successful career in software development and programming.

**Job Market:** Entry level positions in software development as programmers, software engineers, systems analysts, and applications software programmers. The Computer Science program is also a transfer program designed to fulfill the requirements for the first two years of a B.S. Degree in Computer Science. *(See Sections 7 and 8)*

### PHOTOGRAPHICS PROGRAM

#### Computer Graphic Design/Photography

**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

**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, and Photographic Developing/Printing Technician. *(See Sections 7 and 8)*
Section 6

Campus Facilities
CAMPUS FACILITIES

Art Gallery
Building 1B, Ext. 4328
The Mt. San Antonio College Art Gallery has a long history of outstanding Gallery Exhibitions highlighting prominent international and national artists as well as its outstanding faculty and students.

The Gallery offers four to five exhibitions per year. Among these are the Faculty Exhibition featuring the works of Mt. San Antonio College faculty artists and the annual Student Exhibition featuring student work from the fine arts, commercial arts, computer graphics, and photography.

For information on Gallery Exhibition dates and times, contact the Art Gallery office at (909) 594-5611, Ext. 4328.

Athletic Facilities, Ext. 4850
Hilmer Lodge Stadium, a 15,000-seat football and track facility, is located in the southeast section of the College campus. This is the home of the world famous “Mt. SAC Relays.” Other athletic facilities include tennis courts, and volleyball courts, as well as a cross-country course, baseball field, softball field, soccer field, a 1,470-seat gymnasium, wrestling gym, strength-training facilities, an Olympic size swimming pool, and an Exercise Science/Wellness Center.

Auxiliary Services, Building 9A, Ext. 4470
The Auxiliary Services/Accounting Office serves students, faculty, and the campus community. The following services are provided by this office:

- administration and supervision of the fiscal operations of the Associated Students
- collection of campus obligations
- accounting for all loans and scholarship disbursements and collections
- 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, Bursar’s Office, Dining Services, and Performing Arts
- administration of contracts
- ticket sales for student events
- administration of the ticket booth for the Mt. SAC Relays and athletic events
- limited cashing of personal checks with campus ID
- ordering and distributing faculty caps and gowns
- billing for catering from Dining Services
- billing for students in State Rehabilitation, JTTPA, GAIN, ILP, TRA, EOPS, CARE, Vets and BECA Programs
- payroll/Human Resources for all areas of the enterprise
- processing of purchase orders and checks
- 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 screenings; 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.

Food Services
The Food Services Department provides the campus community with a cafeteria, coffeehouse, fast food restaurant, and four convenience stores.

Campus Café
Building 8, Ext. 4105
The Campus Café, located on the west side of campus next to the SacBookRac, features homemade, fresh cafeteria-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

Campus Facilities
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.” Please call (909) 594-5611, Ext. 3810. Special programs are offered for elementary and secondary school groups by reservation. Contact the College's Campus Events office, Ext. 4794, for further information.

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.
Programs of Study Leading to an Associate in Arts Degree or an Associate in Science Degree
PROGRAMS LEADING TO AN ASSOCIATES DEGREE

Mt. San Antonio College offers six Associate in Arts degrees:

A.A. Transfer Studies – CSU
A.A. Transfer Studies – IGETC
A.A. Fine Arts & Humanities
A.A. Language Arts & Communication
A.A. Natural Sciences & Mathematics
A.A. Social & Behavioral Sciences

The A.A. Transfer Studies, CSU and IGETC, are designed to meet the needs of students planning to transfer to a 4-year college or university. The other four degree options are designed to meet the needs of students interested in graduating with an Associate level college degree by studying specific related disciplines of academic subjects. 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 to ensure that if a student did decide at a later date to transfer to a university, they would have a solid beginning in the transfer planning process.

A general overview of the “Graduation Requirements” for these Associate in Arts degrees is found on page 31 of this catalog. Below you will find the specific “major” requirements for each of the six A.A. degree options offered.

A.A. TRANSFER STUDIES – CSU

This major is intended for students who are planning to transfer to a university. They are also planning to transfer to one of the campuses of the California State University System. The “Major” requirements for this degree are met by completing the CSU General Education Pattern, listed later in this catalog. Section 9. In addition to CSU General Education certification, a student must meet all graduation requirements for an Associate in Arts degree, described on page 31 of this catalog.

A.A. TRANSFER STUDIES – IGETC

This major is intended for students who are planning to transfer to a university. Most students who follow IGETC are hoping to transfer to a University of California campus, but this pattern is also accepted by the California State University system. The “Major” requirements for an A.A. degree are met by completing the IGETC pattern. In addition to completing the IGETC pattern, a student must meet all graduation requirements for an Associate in Arts degree, described on page 31 of this catalog.

NOTE: All courses used for the A.A. degree majors may be doubled counted toward the Mt. San Antonio College General Education requirements.

ASSOCIATE IN ARTS DEGREES – REQUIRED COURSES

A.A. Fine Arts & Humanities
Select 18 “Degree Appropriate” units from the following related disciplines:

- AHIS
- DNT
- HUMA 1
- PHIL
- ARTB
- Foreign
- ID 180
- PHOT 15
- ARTD
- Languages
- LIT
- SIGN
- ARTS
- HIST
- MUS
- THTR

A.A. Language Arts & Communication
Select 18 “Degree Appropriate” units from the following related disciplines:

- ENGL
- JOUR
- PHIL 8
- R-TV
- Foreign
- LIT
- PHIL 9
- SPCH
- Languages
- PHIL 3
- PSYC 5
- SIGN

A.A. Natural Sciences & Mathematics
Select 18 “Degree Appropriate” units from the following related disciplines:

- AGOR
- ASTR
- MATH
- PHYS
- ANAT
- BIOL
- METO
- PSYC 1B
- ANTH
- CHEM
- MIRC
- ANTH 1H
- CSCI
- NF 25
- ANTH 1L
- GEOG
- OCEA
- ANTH 3
- GEOL
- PHSC

A.A. Social & Behavioral Sciences
Select 18 “Degree Appropriate” units from the following related disciplines:

- AGAG
- BIOL 15
- COUN
- JOUR 100
- AGFR
- BIOL 15H
- EDUC
- POLI
- ANTH 3
- BUSC 1A
- GEOG 2
- PSYC
- ANTH 5
- BUSC 1AH
- GEOG 2H
- SOC
- ANTH 22
- BUSC 1B
- GEOG 30
- SPCH 26
- ANTH 30
- BUSC 1BH
- HIST
- ANTH 99
- CHLD
- JOUR 2, or

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. 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 deadline dates for submitting the Application for Graduation are as follows:

Fall: deadline to apply for fall graduation is the end of the ninth week.
Spring: deadline to apply for spring graduation is the end of the ninth week.
Summer: deadline to apply for spring graduation is the end of the ninth week.

Students should check the Schedule of Classes (in Key Dates to Remember) 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.

NOTE: All students must file a petition for graduation with the Admissions & Records Office and have on file all required documents and transcripts.
ASSOCIATE IN ARTS DEGREE GRADUATION REQUIREMENTS 2006/2007

**A.A. Degrees in the following majors:**

- Social & Behavioral Sciences
- Fine Arts & Humanities
- Language Arts & Communication
- Natural Science & Mathematics

**Unit Requirement:** Sixty (60) degree-appropriate units. A letter grade of "C" or better is required for each course required for graduation.

**Major Requirement:** A minimum of 18 units chosen from the appropriate list of courses for the major. A list of the courses found on page 30 of this catalog.

**Math Competency:** (3 units minimum)

This requirement is met by completing one of the following with a grade of "C" or better:

1. Math 61 Plane Geometry, or
2. Math 71 Intermediate Algebra, or
3. MATH 71B Intermediate Algebra—Second Half, or
4. Completing a more advanced college level mathematics course.

**GPA Requirement:** A Mt. San Antonio College "degree" total grade point average, and "all college" total grade point average of 2.0.

**General Education Requirements:** At least 24 units are required which shall include courses in each of the General Education areas, A through E (see pages 33-34). All courses must be completed with a grade of "C" or better.

**A.A. Transfer Studies — CSU:**

**Unit Requirement:** Sixty (60) baccalaureate level (transferable) units are required for graduation. A letter grade of "C" or better is required for each course required for graduation.

**Major Requirement:** Completion of CSU G.E. Certification Pattern. (see pages 99-101)

**Math Competency:** Satisfied by completing IGETC Certification Pattern. (see pages 103 - 104)

**GPA Requirement:** A Mt. San Antonio College "degree" total grade point average, "all college" total grade point average, and "baccalaureate" level grade point average of 2.0.

**General Education Requirements:** Satisfied by completion of the IGETC Certification Pattern, AND successful completion of Oral Communication requirement, AND the CSU U.S. History and American Institutions graduation requirement, AND completion of local Mt. SAC G.E., Area E (see pages 99 - 101 and 35).

**NOTE:** The information stated below pertains to all A.A. degree options described above:

**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:

1. AGAG 91 Agricultural Calculations or
2. ELMA 65B Mathematics of Electronics or
3. MATH 51 Elementary Algebra or
4. MATH 51A Elementary Algebra—First Half and MATH 51B Elementary Algebra—Second Half or
5. MATH 52 Algebra with Applications I and MATH 72 Algebra with Applications II or
6. MATH 59 Fundamentals of Applied Mathematics or
7. MATH 61 Plane Geometry or
8. READ 90 Preparing for College Reading
9. AMLA 33R American Language Advanced Reading or obtaining placement into READ 100 on initial Reading placement exam or obtaining a satisfactory score on the Reading Competency Test.

**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:

1. AGAG 91 Agricultural Calculations or
2. ELMA 65B Mathematics of Electronics or
3. MATH 51 Elementary Algebra or
4. MATH 51A Elementary Algebra—First Half and MATH 51B Elementary Algebra—Second Half or
5. MATH 52 Algebra with Applications I and MATH 72 Algebra with Applications II or
6. MATH 59 Fundamentals of Applied Mathematics or
7. MATH 61 Plane Geometry or
8. READ 90 Preparing for College Reading
9. AMLA 33R American Language Advanced Reading or obtaining placement into READ 100 on initial Reading placement exam or obtaining a satisfactory score on the Reading Competency Test.

NOTE: All students must file a petition for graduation with the Admissions & Records Office and have on file all required documents and transcripts.

ASSOCIATE IN SCIENCE DEGREE GRADUATION REQUIREMENTS 2006/2007

**Unit Requirement:** Sixty (60) associate degree-appropriate units with a letter grade of "C" or better in all courses required for graduation.

**Major Requirement:** Satisfied by completing all the required courses in an approved occupational program with a minimum grade of "C" in all courses.

**Math Competency:** (3 units minimum)

This requirement is met by completing one of the following courses with a grade of "C" or better:

1. AGAG 91 Agricultural Calculations or
2. ELMA 65B Mathematics of Electronics or
3. MATH 51 Elementary Algebra or
4. MATH 51A Elementary Algebra—First Half and MATH 51B Elementary Algebra—Second Half or
5. MATH 52 Algebra with Applications I and MATH 72 Algebra with Applications II or
6. MATH 59 Fundamentals of Applied Mathematics or
7. MATH 61 Plane Geometry or
8. READ 90 Preparing for College Reading
9. AMLA 33R American Language Advanced Reading or obtaining placement into READ 100 on initial Reading placement exam or obtaining a satisfactory score on the Reading Competency Test.

**Residency Requirement:** The residency requirement for Mt. San Antonio College can be met in either of two ways:

a) 12 units in residence and enrollment in last semester, or
b) 45 units in residence if the last semester is not at Mt. San Antonio College
Programs Leading to an Associates Degree

GENERAL EDUCATION REQUIREMENTS

Philosophy Statement

The general education component of the associate degree introduces students to the humanities, social sciences, natural sciences, applied sciences, and technology. It exposes students to different areas of study; demands the acquisition and use of reading, writing, and critical thinking skills at appropriate post-secondary levels; imparts a sense of our shared cultural heritage and how to function as responsible, ethical individuals in a complex society; and instills a level of intellectual curiosity and self-awareness conducive to lifelong learning and personal growth.

Together with other Mt. San Antonio College degree requirements, the general education component of the associate degree prepares students to:

- transfer to and function successfully in a baccalaureate degree granting institution;
- enter the work force as a competent, productive citizen;
- live a richer, more rewarding life.

General education is the distinguishing feature of higher education. It is a broadly-based core of humanistic knowledge and abilities, 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. They provide an understanding of the human condition and of human accomplishments and encourage a lifelong interest in learning.

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, computation, and critical thinking.
2. Improve students’ abilities to:
   - communicate oral and written ideas effectively;
   - define problems, design solutions, critically analyze results;
   - work effectively and cooperatively with others;
   - work 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.

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:
  - provide 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:
  - provide understanding and appreciation of the methodologies and tools of science;
  - emphasize the influence of scientific knowledge on the development of civilization;
  - impart appreciation and understanding of basic concepts, not just skills;
  - offer specific inquiry into mathematical concepts, quantitative reasoning and application. (See Mt. SAC degree competency requirements.)

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 work 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;
  - probe the relationship between these institutions and human behavior;
  - examine these institutions in both their historical and contemporary context;
  - include both Western and non-Western settings.

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
GENERAL EDUCATION REQUIREMENTS FOR 2006-2007

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
SPCH 1A Public Speaking, or
SPCH 1AH Public Speaking – Honors

LIFE SCIENCES

AGOR 1 Horticultural Science
ANAT 10A Introductory Human Anatomy
ANAT 10B Introductory Human Physiology
ANAT 35 Human Anatomy
ANAT 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
MICR 1 Principles of Microbiology
MICR 22 Microbiology
PSYC 1B Biological Psychology

GENERAL EDUCATION REQUIREMENTS FOR 2006-2007 (continued)

AREA B:
The Physical Universe and Life (3 units):
Select one [1] course from the Physical Sciences or Life Sciences:

PHYS 1 Physics
PHYS 2AG General Physics
PHYS 2BG General Physics
PHYS 4A Engineering Physics

LIFE SCIENCES

AGOR 1 Horticultural Science
ANAT 10A Introductory Human Anatomy
ANAT 10B Introductory Human Physiology
ANAT 35 Human Anatomy
ANAT 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
MICR 1 Principles of Microbiology
MICR 22 Microbiology
PSYC 1B Biological Psychology

PHYS 1 Physics
PHYS 2AG General Physics
PHYS 2BG General Physics
PHYS 4A Engineering Physics

ARTS and Humanities (6 units):

AHIS 1H History of Western Art: Prehistoric Through Gothic
AHIS 4H History of Western Art: Prehistoric Through Gothic – Honors
AHIS 5 History of Western Art: Renaissance Through Modern

HUMANITIES

AHIS 1H History of Western Art: Prehistoric Through Gothic
AHIS 4H History of Western Art: Prehistoric Through Gothic – Honors
AHIS 5 History of Western Art: Renaissance Through Modern

*Courses may not be double counted to satisfy more than one area, even if a course is listed in more than one area.
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 25</td>
<td>Contemporary Mexican American Literature</td>
</tr>
<tr>
<td>SPAN 33</td>
<td>Images of Women in Literature</td>
</tr>
<tr>
<td>SPAN 35</td>
<td>Science Fiction and Fantasy Survey</td>
</tr>
<tr>
<td>SPAN 36</td>
<td>Introduction to Mythology</td>
</tr>
<tr>
<td>SPAN 40</td>
<td>Children’s Literature</td>
</tr>
<tr>
<td>SPAN 46</td>
<td>The Bible as Literature: Old Testament</td>
</tr>
<tr>
<td>SPAN 47</td>
<td>The Bible as Literature: New Testament</td>
</tr>
<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>
</tr>
<tr>
<td>PHIL 12H</td>
<td>Ethics – Honors</td>
</tr>
<tr>
<td>PHIL 15</td>
<td>Major World Religions</td>
</tr>
<tr>
<td>PHIL 15H</td>
<td>Major World Religions – Honors</td>
</tr>
<tr>
<td>PHIL 20A</td>
<td>History of Western Philosophy</td>
</tr>
<tr>
<td>PHIL 20B</td>
<td>History of Western Philosophy</td>
</tr>
<tr>
<td>SIGN 101</td>
<td>American Sign Language 1</td>
</tr>
<tr>
<td>SIGN 202</td>
<td>American Deaf Culture</td>
</tr>
<tr>
<td>SPAN 1</td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td>SPAN 2</td>
<td>Continuing Elementary Spanish</td>
</tr>
<tr>
<td>SPAN 3</td>
<td>Intermediate Spanish</td>
</tr>
<tr>
<td>SPAN 4</td>
<td>Continuing Intermediate Spanish</td>
</tr>
<tr>
<td>SPAN 11</td>
<td>Spanish for the Spanish Speaking</td>
</tr>
<tr>
<td>SPAN 12</td>
<td>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:

*HIST 1 | History of the U.S. |
*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 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 |
POLI 1 | Political Science |
POLI 1H | Political Science – Honors |
POLI 25 | Politics of the Mexican American |
POLI 35 | African American Politics |

**Lifelong Understanding and Self-Development (3 units):**

Select one [1] course from the following:

AGAG 1 | Food Production, Land Use and Politics – A Global Perspective |
AGFR 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, and Community |
CHILD 10 | Child Growth and Development |
CHILD 10H | Child Growth and Development – Honors |
CHILD 10H | Child Growth and Development – Honors |
CHLD 10H | Child Growth and Development – Honors |
CHLD 10H | Child Growth and Development – Honors |
CHLD 10H | Child Growth and Development – Honors |
CHLD 10H | Child Growth and Development – Honors |

**AREA E:**

**Intergroup Communication and Conflict Resolution (3 units):**

Select one [1] course from the following:

**BUSINESS AND EMERGING TECHNIQUES (4 units):**

Accounting | 36 |
Administrative Assistant | 36 |
Advertising Design and Illustration | 36 |
Agri-Business | 36 |
Agri-Technology | 36 |
Air Conditioning and Refrigeration | 37 |
Airframe and Aircraft Powerplant Maintenance Technology – Day | 37 |
Airframe and Aircraft Powerplant Maintenance Technology – Evening | 37 |
Alcohol/Drug Counseling | 38 |
Animation | 38 |
Architectural Technology | 38 |
Aviation Science | 39 |
Business Administration | 39 |
Business Management | 39 |
Business Retail Management | 39 |
Chemical Laboratory Technician | 39 |
Child Development | 39 |
Commercial Flight | 40 |
Computer and Networking Technology | 40 |
Computer Graphics Design/Photography | 40 |
Computer Network Administration and Security Management | 40 |
Computer Programmer – C++ | 41 |
Computer Programmer – Database Management Systems | 41 |
Computer Programmer – Telecommunications | 41 |
Computer Programmer – Visual Basic | 41 |
Construction Inspection | 42 |
Correctional Sciences | 42 |
### ALPHABETICAL LISTING — ASSOCIATE IN SCIENCE DEGREE (A.S.) (continued)

<table>
<thead>
<tr>
<th>Program</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop Publishing</td>
<td>42</td>
</tr>
<tr>
<td>Educational Paraprofessional</td>
<td>42</td>
</tr>
<tr>
<td>Electronics and Computer Engineering Technology</td>
<td>42</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>43</td>
</tr>
<tr>
<td>Engineering Design Technology</td>
<td>43</td>
</tr>
<tr>
<td>Equipment Technology</td>
<td>44</td>
</tr>
<tr>
<td>Escrow Management</td>
<td>44</td>
</tr>
<tr>
<td>Family and Consumer Sciences</td>
<td>44</td>
</tr>
<tr>
<td>Fashion Design</td>
<td>44</td>
</tr>
<tr>
<td>Fashion Merchandising</td>
<td>45</td>
</tr>
<tr>
<td>Fire Technology</td>
<td>45</td>
</tr>
<tr>
<td>Fire Technology — Administration</td>
<td>45</td>
</tr>
<tr>
<td>Fire Technology — Administrative Communications</td>
<td>45</td>
</tr>
<tr>
<td>Fire Technology — Administrative Law</td>
<td>45</td>
</tr>
<tr>
<td>Fire Technology — Fire Management</td>
<td>45</td>
</tr>
<tr>
<td>Fire Technology — Fire Prevention</td>
<td>46</td>
</tr>
<tr>
<td>Fire Technology — Fire Training</td>
<td>46</td>
</tr>
<tr>
<td>Fire Technology — Private Fire Service</td>
<td>46</td>
</tr>
<tr>
<td>Floral Design</td>
<td>46</td>
</tr>
<tr>
<td>General Business</td>
<td>47</td>
</tr>
<tr>
<td>Histologic Technician Training</td>
<td>47</td>
</tr>
<tr>
<td>Horse Ranch Management</td>
<td>47</td>
</tr>
<tr>
<td>Hospitality and Restaurant Management</td>
<td>47</td>
</tr>
<tr>
<td>Human Resource Management</td>
<td>48</td>
</tr>
<tr>
<td>Interior Design</td>
<td>48</td>
</tr>
<tr>
<td>Interior Design — Kitchen and Bath Design</td>
<td>48</td>
</tr>
<tr>
<td>International Business</td>
<td>48</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>49</td>
</tr>
<tr>
<td>Licensed Vocational Nurse to RN</td>
<td>49</td>
</tr>
<tr>
<td>Livestock Management</td>
<td>50</td>
</tr>
<tr>
<td>Manufacturing Technology</td>
<td>50</td>
</tr>
<tr>
<td>Marketing Management</td>
<td>50</td>
</tr>
<tr>
<td>Mental Health Technology — Psychiatric Technician</td>
<td>51</td>
</tr>
<tr>
<td>Nursing</td>
<td>51</td>
</tr>
<tr>
<td>Ornamental Horticulture</td>
<td>52</td>
</tr>
<tr>
<td>Paralegal/Legal — Bankruptcy Specialty</td>
<td>53</td>
</tr>
<tr>
<td>Paralegal/Legal — Corporations/ Business Specialty</td>
<td>53</td>
</tr>
<tr>
<td>Paralegal/Legal — Criminal Specialty</td>
<td>54</td>
</tr>
<tr>
<td>Paralegal/Legal — Family Law Specialty</td>
<td>54</td>
</tr>
<tr>
<td>Paralegal/Legal — Landlord/Tenant Specialty</td>
<td>54</td>
</tr>
<tr>
<td>Park &amp; Sports Turf Management</td>
<td>55</td>
</tr>
<tr>
<td>Pet Science</td>
<td>55</td>
</tr>
<tr>
<td>Physical Education</td>
<td>55</td>
</tr>
<tr>
<td>Psychiatric Technician to RN</td>
<td>56</td>
</tr>
<tr>
<td>Radio Broadcasting: Behind the Scenes</td>
<td>57</td>
</tr>
<tr>
<td>Radio Broadcasting: On the Air</td>
<td>57</td>
</tr>
<tr>
<td>Radiologic Technology</td>
<td>57</td>
</tr>
<tr>
<td>Real Estate</td>
<td>58</td>
</tr>
<tr>
<td>Real Estate Appraisal</td>
<td>58</td>
</tr>
<tr>
<td>Recreation</td>
<td>58</td>
</tr>
<tr>
<td>Registered Veterinary Technology</td>
<td>59</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>59</td>
</tr>
<tr>
<td>Sign Language/Interpreting</td>
<td>60</td>
</tr>
<tr>
<td>Small Business Management</td>
<td>60</td>
</tr>
<tr>
<td>Television Production</td>
<td>60</td>
</tr>
</tbody>
</table>

### LISTING BY INSTRUCTIONAL DIVISION — ASSOCIATE IN SCIENCE DEGREE (A.S.)

#### Arts Division
- Advertising Design and Illustration | 36
- Animation | 38
- Computer Graphics Design/Photography | 40
- Photography | 55
- Radio Broadcasting: Behind the Scenes | 57
- Radio Broadcasting: On the Air | 57
- Television Production | 60

#### Business & Economic Development Division
- Accounting | 36
- Administrative Assistant | 36
- Business Management | 39
- Business Retail Management | 39
- Child Development | 39
- Computer Network Administration & Security Management | 40
- Computer Programmer — C++ | 41
- Computer Programmer — Database Management Systems | 41
- Computer Programmer — Telecommunications | 41
- Computer Programmer — Visual Basic | 41
- Desktop Publishing | 42
- Escrow Management | 44
- Family and Consumer Sciences | 44
- Fashion Design | 44
- Fashion Merchandising | 44
- General Business | 47
- Hospitality and Restaurant Management | 47
- Human Resource Management | 48
- Interior Design | 48
- Interior Design — Kitchen and Bath Design | 48
- International Business | 48
- Marketing Management | 50
- Paralegal/Legal — Bankruptcy Specialty | 53
- Paralegal/Legal — Corporations/ Business Specialty | 53
- Paralegal/Legal — Criminal Specialty | 54
- Paralegal/Legal — Family Law Specialty | 54
- Paralegal/Legal — Landlord/Tenant Specialty | 54
- Real Estate | 58
- Real Estate Appraisal | 58
- Small Business Management | 60

#### Humanities & Social Sciences Division
- Agri-Business | 36
- Agri-Technology | 36
- Chemical Laboratory Technician | 39
- Equipment Technology | 44
- Floral Design | 46
- Histologic Technician Training | 47
- Horse Ranch Management | 47
- Livestock Management | 50
- Ornamental Horticulture | 52
- Park & Sports Turf Management | 55
- Pet Science | 55
- Registered Veterinary Technology | 59

#### Physical Education Division
- Physical Education | 55
- Recreation | 58

#### Technology & Health Division
- Air Conditioning and Refrigeration | 37
- Airframe and Aircraft Powerplant Maintenance Technology — Day | 37
- Airframe and Aircraft Powerplant Maintenance Technology — Evening | 37
- Alcohol/Drug Counseling | 38
- Architectural Technology | 39
- Aviation Science | 39
- Commercial Flight | 40
- Computer and Networking Technology | 40
- Construction Inspection | 42
- Correctional Sciences | 42
- Electronics and Computer Engineering Technology | 42
- Emergency Medical Services | 43
- Engineering Design Technology | 43
- Fire Technology | 45
- Fire Technology — Administration | 45
- Fire Technology — Administrative Assistant | 45
- Fire Technology — Administrative Communications | 45
- Fire Technology — Fire Management | 45
- Fire Technology — Fire Prevention | 46
- Fire Technology — Fire Training | 46
- Fire Technology — Private Fire Service | 46
- Floral Design | 46
- General Business | 47
- Hospitality and Restaurant Management | 47
- Human Resource Management | 48
- Interior Design | 48
- Interior Design — Kitchen and Bath Design | 48
- International Business | 48
- Marketing Management | 50
- Paralegal/Legal — Bankruptcy Specialty | 53
- Paralegal/Legal — Corporations/ Business Specialty | 53
- Paralegal/Legal — Criminal Specialty | 54
- Paralegal/Legal — Family Law Specialty | 54
- Paralegal/Legal — Landlord/Tenant Specialty | 54
- Real Estate | 58
- Real Estate Appraisal | 58
- Small Business Management | 60
- Sign Language/Interpreting | 60
- Small Business Management | 60

#### Natural Sciences Division
- Chemical Laboratory Technician | 39
- Equipment Technology | 44
- Floral Design | 46
- Histologic Technician Training | 47
- Horse Ranch Management | 47
- Livestock Management | 50
- Ornamental Horticulture | 52
- Park & Sports Turf Management | 55
- Pet Science | 55
- Registered Veterinary Technology | 59
- Technical Education
- Animal Science | 36
- Environmental Science | 36
Programs Leading to an Associates Degree

Accounting
Accounting and Management Department
Major 20502
Students preparing to become professional accountants should follow the Business Administration course for a four-year college or university. The following is semi-professional training for those who seek employment in bookkeeping or accounting positions at the end of two years.

Requirements for the Major
Required courses:
- BUSA 8 Principles of Accounting — 5.0 CSU, UC — Financial
- BUSA 21 Cost Accounting — 4.0
- BUSA 52 Intermediate Accounting — 3.0
- BUSA 53 Ten-Key Calculations, or — 2.0
- BUSA 81 Work Experience in Accounting — 1.0
- BUSM 61 Business Organization and Management — 3.0
- BUSA 75 Using Microcomputers in Financial Accounting, or — 1.0
- BUSA 81 Work Experience in Accounting — 1.0
- BUSA 76 Using Microcomputers in Managerial Accounting, or — 1.0
- BUSM 20 Principles of Business — 3.0 CSU, UC
- BUSM 25 Business Communications — 3.0 CSU
- CISB 15 Microcomputer Applications — 4.0 CSU, UC

Total Units — 36.0 - 37.0

Administrative Assistant
Office Technology Department
Major 20514
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.

Requirements for the Major
Required courses:
- ARTD 5A Drawing: Beginning — 3.0 CSU, UC
- ARTD 20 Design: Two Dimensional — 3.0 CSU, UC
- ARTD 25A Painting: Beginning — 3.0 CSU, UC

PLUS
- BUSM 7 5 Microcomputer Applications — 4.0 CSU, UC

Total Units — 30.0

Accounting

Required Electives:
- BUSM 61 Business Organization and Management — 3.0
- BUSM 66 Small Business Management — 3.0

Total Units — 30.0

Agri-Business
Agricultural Sciences Department
Major 20114
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 desiring a Bachelor's Degree should consult with the department chairperson or faculty 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:
- AGAN 1 Animal Science — 3.0 CSU, UC
- AGOR 1 Horticultural Science — 3.0 CSU
- AGOR 32 Landscaping and Nursery Management — 3.0
- AGPS 70 Pet Shop Management — 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 66 Small Business Management — 3.0
- BUSS 36 Principles of Marketing — 3.0 CSU

Total Units — 36.0

Agri-Technology
Agricultural Sciences Department
Major 20101
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 which 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. 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, 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 (transfer program) should consult with the department chairperson or faculty 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.

Required courses:
- AGAG 9 Microcomputer Applications in Agriculture — 3.0 CSU, UC
- AGAG 9 Food Production, Land Use and Politics — A Global Perspective — 3.0 CSU, UC
- AGAG 91 Agricultural Calculations — 3.0
- AGAN 1 Animal Science — 3.0 CSU, UC
- AGOR 1 Horticultural Science — 3.0 CSU
- AGOR 32 Landscaping and Nursery Management — 3.0
- AGPS 70 Pet Shop Management — 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 66 Small Business Management — 3.0
- BUSS 36 Principles of Marketing — 3.0 CSU

Total Units — 36.0
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, 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 in Agriculture 3.0 CSU, UC
- **AGAG 1** Food Production, Land Use and Politics – A Global Perspective 3.0 CSU, UC
- **AGAG 91** Agricultural Calculations 3.0
- **AGAN 1** Animal Science 3.0 CSU, UC
- **AGOR 1** Horticultural Science 3.0 CSU
- **AGOR 32** Landscaping and Nursery Management 3.0 CSU
- **AGOR 56** Engine Diagnostics 3.0 CSU
- **AGOR 71** Landscape Construction Fundamentals 3.0 CSU

**PLUS**

Select three (3) courses from:
- **AGFR 20** Conservation of Natural Resources 3.0 CSU, UC
- **AGL 14** Swine Production 3.0 CSU
- **AGL 16** Horse Production 4.0 CSU, UC
- **AGL 17** Sheep Production 3.0 CSU
- **AGL 30** Beef Production 3.0 CSU
- **AGLR 12** Environmental Vegetable Gardening 3.0 CSU, UC
- **AGOR 24** Integrated Pest Management 3.0 CSU
- **AGOR 62** Landscape Irrigation – Design and Installation 3.0 CSU
- **AGPE 70** Pet Shop Management 3.0
- **AGPE 71** Canine Management 3.0

**Total Units 33.0 - 34.0**

**Air Conditioning and Refrigeration**

**Air Conditioning, Welding & Water 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 a counselor or advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**
- **AIRC 10** Technical Mathematics in Air Conditioning and Refrigeration 2.0
- **AIRC 11** Welding for Air Conditioning and Refrigeration 2.0
- **AIRC 12** Air Conditioning Codes and Standards 3.0
- **AIRC 20** Refrigeration Fundamentals 3.0
- **AIRC 23** Electrical Fundamentals for Air Conditioning and Refrigeration 4.0
- **AIRC 26A** Heat Pump Fundamentals 1.5
- **AIRC 26B** Gas Heating Fundamentals 2.0
- **AIRC 30** Heat Load Calculations 3.0
- **AIRC 31** Commercial Electrical for Air Conditioning and Refrigeration 4.0
- **AIRC 32A** Air Properties and Measurement 1.5
- **AIRC 32B** Air Distribution Systems 1.5
- **AIRC 34** Advanced Mechanical Refrigeration 4.0
- **AIRC 37** Pneumatic Controls 2.0
- **AIRC 39** Building Automation Systems 4.0

**Total Units 37.5**

**Airframe and Aircraft Powerplant Maintenance Technology — Day**

**Aircraft Maintenance Technology & Manufacturing Department 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 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 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 a counselor or advisor to discuss transferability of courses.

**Requirements for the Major**

**Required courses:**
- **AIRM 65A** Aircraft Powerplant Maintenance Technology 12.0 CSU
- **AIRM 65B** Aircraft Powerplant Maintenance Technology 12.0
- **AIRM 66A** Airframe Maintenance Technology 12.0 CSU
- **AIRM 66B** Airframe Maintenance Technology 12.0
- **AIRM 70A** Aircraft Maintenance Electricity and Electronics 3.0
- **AIRM 70B** Aircraft Maintenance Electricity and Electronics 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 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

The Airframe and Aircraft Powerplant Maintenance Technology faculty recommend that students complement their studies with selected elective courses chosen from the list above. Students should meet with a professor of Airframe and Aircraft Powerplant Maintenance Technology to help them determine which electives best suit their career plans.

**Airframe and Aircraft Powerplant Maintenance Technology — Evening**

**Aircraft Maintenance Technology & Manufacturing Department 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 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 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 a counselor or advisor to discuss transferability of courses.

**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
**Programs Leading to an Associates Degree**

### Requirements for the Major

**Required courses:**
- AIRM 70A Aircraft Maintenance 3.0
- AIRM 70B Aircraft Maintenance 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 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
- AIRM 97B Aircraft Powerplant Maintenance Technology 3.0
- AIRM 98A Aircraft Powerplant Maintenance Technology 3.0
- AIRM 98B 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

### 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.

**Requirements for the Major**

**Required core courses:**
- AD 1 Alcohol/Drug Dependency 3.0 CSU
- AD 2 Physiological Effects of Alcohol/Drugs 3.0 CSU
- AD 3 Chemical Dependency: Intervention, Treatment and Recovery 3.0 CSU
- AD 4 Issues in Domestic Violence 3.0
- AD 5 Chemical Dependency: Prevention and Education 1.5 CSU
- AD 6 Dual Diagnosis 3.0 CSU

**Required skill courses:**
- AD 8 Group Process and Leadership 3.0
- AD 9 Family Counseling 3.0
- AD 10 Client Record and Documentation 1.5
- AD 11 Techniques of Intervention and Referral 3.0

**Required field work courses:**
- AD 13 Internship/Seminar 3.5 CSU
- AD 14 Advanced Internship/Seminar 3.5 CSU

**PLUS  Select six (6) units from:**
- CHLD 10 Child Growth and Development, or
- CHLD 10H Child Growth and Development – Honors
- PSYC 1A General Psychology, or
- PSYC 1AH General Psychology – Honors
- PSYC 19 Abnormal Psychology

**Total Units 40.0**

### Animation

**Art Department Major 21006**

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 both an A.S. Degree and certificates.

**Requirements for the Major**

**Required courses:**
- ANIM 101 Drawing – Gesture and Figure 3.0 CSU
- ANIM 104 Drawing Fundamentals, or
- 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
- ARTC 70 Computer Graphics: Introduction 3.0 CSU
- ARTD 17A Drawing: Life 3.0 CSU, UC
- ARTD 20 Design: Two Dimensional 3.0 CSU, UC
- ARTS 22 Design: Three-Dimensional 3.0 CSU, UC

**Total Units 36.0**

### Architectural Technology

**Architecture and Engineering Design Department Major 20201**

This program is intended to prepare 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. The student will be required to develop both design and working drawing portfolios. Current technology and computer (CADD) 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 13 Architectural Illustration 3.0 CSU, UC
- ARCH 14 Building and Zoning Codes 3.0
- ARCH 15 Architectural Working Drawings – I 3.0 CSU
AERO 26 Aviation Weather 3.0 CSU
AERO 23 Primary Pilot Ground School 4.0 CSU
AIRT 41 Aircraft Recognition and Performance 2.0 CSU
AIRT 42 Air Traffic Control Environment 3.0 CSU
AIRT 43 Air Traffic Control Team Skills 1.5 CSU
CSB 11 Computer Information Systems 3.5 CSU, UC
TRAN 17 Air Transportation 3.0 CSU

Total Units 31.0

Recommended Electives:
AERO 25 Commercial Pilot Ground School
AERO 28 Aircraft and Engines
AERO 40 Flight
AERO 40L Flight Laboratory
BUSM 60 Human Relations in Business

Total Units 46.0

Recommended Electives:
AHIS 1 Understanding the Visual Arts
ARCH 89 Architectural Work Experience
ARTD 15A Drawing: Beginning
ARTD 20 Design: Two-Dimensional
ARTS 22 Design: Three-Dimensional
EDT 26 Civil Engineering Technology and CAD
ID 130 Applied Color and Design Theory
INS 67 Reading Construction Drawings
INS 70 Elements of Construction
INS 71 Construction Estimating

ARTA, ARTC, ARTD, ARTS, and ID courses are recommended for transfer portfolios.

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:
AERO 23 Primary Pilot Ground School 4.0 CSU
AERO 24 Navigation 3.0 CSU
AERO 26 Aviation Weather 3.0 CSU
AERO 27 Aviation Safety and Human Factors 3.0 CSU
AERO 29 Federal Aviation Regulations 2.0 CSU
AERO 30 Instrument Ground School 3.0 CSU
AIRT 41 Aircraft Recognition and Performance 2.0 CSU
AIRT 42 Air Traffic Control Environment 3.0 CSU
AIRT 43 Air Traffic Control Team Skills 1.5 CSU
CSB 11 Computer Information Systems 3.5 CSU, UC
TRAN 17 Air Transportation 3.0 CSU

Total Units 33.0

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:
BUSM 10 Principles of Continuous Quality Improvement 3.0
BUSM 20 Principles of Business 3.0 CSU, UC
BUSM 51 Principles of International Business 3.0
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
BUSM 36 Principles of Marketing 3.0 CSU
CSB 15 Microcomputer Applications 4.0 CSU, UC

Total Units 30.0

Recommended Electives:
BUSM 81 Work Experience in Business, or
BUSM 82 Work Experience in Business, or
BUSM 83 Work Experience in Business, or
BUSM 84 Work Experience in Business
BUSM 85 Special Issues in Business, or
BUSM 85 Special Issues in Marketing

Chemical Laboratory Technician
Biological Sciences Department
Major 20950

This program provides theoretical and technical training to prepare students for employment as entry-level chemical technicians 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 trouble-shooting of experimental designs and outcomes.

Requirements for the Major
Required courses:
BUSM 10 Principles of Continuous Quality Improvement 3.0
CHEM 20 Introductory Organic and Biochemistry 5.0 CSU, UC
CHEM 50 General Chemistry I 5.0 CSU, UC
CHEM 51 General Chemistry II 5.0 CSU, UC
CHEM 60 Quantitative Chemical Analysis 5.0 CSU, UC
CHEM 75 Instrumental Analysis 5.0

Child Development
Family and Consumer Sciences Department
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 nine certificate programs 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:
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
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:
- AERO 23 Primary Pilot Ground School 4.0 CSU
- AERO 24 Navigation 3.0 CSU
- AERO 25 Commercial Pilot Ground School 3.0 CSU
- AERO 26 Aviation Weather 3.0 CSU
- AERO 27 Aviation Safety and Human Factors 3.0 CSU
- AERO 28 Aircraft and Engines 3.0 CSU
- AERO 29 Federal Aviation Regulations 2.0 CSU
- AERO 30 Instrument Ground School 3.0 CSU
- TRN 17 Air Transportation 3.0 CSU

Total Units 27.0

Recommended Electives:
- AERO 40 Flight
- AERO 40L Flight Laboratory
- AERO 41 Basic Flight Simulator Laboratory
- AERO 58 Flight Instructor Ground School
- AIRT 41 Aircraft Recognition and Performance
- CISB 11 Computer Information Systems

Computer and Networking Technology

Electronics and Computer Technology Department

Major 20725

The Computer and Networking Technology Major and Certificates are intended to prepare 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, and network security. Skills are developed so that students can provide customer service in the installation, software configuration, maintenance, operation, troubleshooting and repair of computers and their associated networking software/hardware. In addition to acquiring specialized skills in computer and networks servicing, the student will be prepared 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. Further, the student will have the requisite skills upon which to build in order to seek additional IT certification.

Requirements for the Major

Required courses:
- CNET 50 PC Servicing 4.0
- CNET 52 PC Operating Systems 4.0
- CNET 54 PC Troubleshooting 4.0
- CNET 56 Computer Networks 4.0
- CNET 60 A+ Certification Preparation 3.0
- CNET 62 Network+ Certification Preparation 3.0
- CNET 64 Server+ Certification Preparation 3.0
- CNET 66 Security+ Certification Preparation 3.0
- ELEC 11 Technical Applications in Microcomputers, or
- CISB 15 Microcomputer Applications 4.0 CSU, UC
- ELEC 50A Electronics Theory 2.0 CSU
- ELEC 50AL Electronics Laboratory 1.0 CSU
- ELEC 50B Electronics Theory 2.0 CSU
- ELEC 50BL Electronics Laboratory 1.0 CSU
- ELEC 56 Digital Electronics 3.0 CSU
- ELEC 56L Digital Electronics Laboratory 1.0 CSU
- ELEC 60 Customer Relations for the Technician 1.0

Total Units 42.0 - 43.0

Recommended Electives:
- CISN 51 Cisco CCNA Networking Fundamentals and Routing
- CISS 25 Network Security and Firewalls
- ELEC 74 Microprocessor Systems
- ELEC 74L Microprocessor Systems Laboratory
- ELMA 65A Mathematics of Electronics
- ELMA 65B Mathematics of Electronics

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 positions 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.

Requirements for the Major

Required courses:
- GRAP 1 Computer Graphics Lab 1.0
- GRAP 10 Photo Editing with Photoshop 3.0
- GRAP 12 Advanced Photo Editing with Photoshop 3.0
- GRAP 14 Digital Color Management 3.0
- GRAP 16 Digital Image Design with Illustrator & Freehand 3.0
- GRAP 18 Advanced Image Design — 3D Modeling Techniques 3.0
- GRAP 20 Applying Photos and Images in Multimedia 3.0
- GRAP 28 Digital Portfolio 2.0
- PHOT 10 Beginning Photography 3.0 CSU, UC
- PHOT 17 Photocommunication 3.0

Total Units 27.0

Recommended Electives:
- AHIS 1 Understanding the Visual Arts, or
- ARTB 1 Understanding the Visual Arts
- COMP 10 Operating the Macintosh Computer
- GRAP 24 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 Graphics

Design/Photography

Photographics Department

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 or the catalog of the institution they wish to attend to address transferability of courses.

2006-07 Mt. San Antonio College Catalog
The main objective of the degree is to prepare students for employment following graduation. Students wishing a Bachelor’s Degree should meet with a counselor or advisor for choices to transfer to available CSU joint degree programs.

Requirements for the Major

Required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISN 21</td>
<td>Network Vulnerabilities and Countermeasures</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>CISN 24</td>
<td>Microsoft NT Network System Administration</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>CISN 51</td>
<td>Cisco CCNA Networking Fundamentals and Routing</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>CISS 21</td>
<td>Network Analysis and NIDS</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>CISS 25</td>
<td>Network Security and Firewalls</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>SL 2</td>
<td>Linked Service Learning</td>
<td>1.0</td>
<td>CSU</td>
</tr>
</tbody>
</table>

PLUS

Select one (1) course from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISB 21</td>
<td>Computer Information Systems</td>
<td>3.5</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CISB 21</td>
<td>Windows Operating System</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>CISN 31</td>
<td>Linux Operating System</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>CISN 34</td>
<td>LINUX Networking and Security</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>CISN 41</td>
<td>Novell Netware Systems</td>
<td>4.0</td>
<td>CSU</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 positions 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

Required core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 7</td>
<td>Principles of Accounting — Financial</td>
<td>5.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CISB 11</td>
<td>Computer Information Systems</td>
<td>3.5</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CISB 15</td>
<td>Microcomputer Applications</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>CISN 11</td>
<td>Systems Analysis and Design</td>
<td>3.5</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CISN 14</td>
<td>Computer Information Systems Systems Seminar</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>CISN 21</td>
<td>Client/Server Architecture, or</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>CISP 21</td>
<td>Programming in Java</td>
<td>4.0</td>
<td>CSU, UC</td>
</tr>
</tbody>
</table>

Total Units 40.0

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 positions 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 program prepares individuals for employment in the computer field in such positions as application development, systems analysis, and telecommunications. It prepares individuals for employment in the computer field in such positions as application development, systems analysis, and telecommunications. 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.
Programs Leading to an Associates Degree

**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:**

<table>
<thead>
<tr>
<th>Course Number</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>CSIB 11</td>
<td>Computer Information Systems</td>
<td>3.5</td>
</tr>
<tr>
<td>CSIB 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>
</tbody>
</table>

**Plus the following courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISD 11</td>
<td>Database Management – Microcomputers</td>
<td>4.0</td>
</tr>
<tr>
<td>CSIN 21</td>
<td>Windows Operating System</td>
<td>4.0</td>
</tr>
<tr>
<td>CISP 11</td>
<td>Basic Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CISP 14</td>
<td>Advanced Basic Programming</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Units** 40.0

**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:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJI 68</td>
<td>Administration of Justice Report Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 10</td>
<td>Introduction to Correctional Sciences</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 15</td>
<td>Control and Supervision of the Offender</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 20</td>
<td>Correctional Law</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 25</td>
<td>Probation and Parole</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 30</td>
<td>Ethnic Relations in Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>ADJI 1</td>
<td>The Administration of Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>ADJI 2</td>
<td>Principles and Procedures of the Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>ADJI 38</td>
<td>Narcotics Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>ADJI 59</td>
<td>Street Gangs and Law Enforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 35</td>
<td>Interviewing and Counseling in Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 40</td>
<td>Crime and Delinquency</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 45</td>
<td>The Violent Offender</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 30.0

**Recommended Electives:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-F 50</td>
<td>Physical Skills Preparation for Law Enforcement</td>
<td></td>
</tr>
<tr>
<td>PE-F 51</td>
<td>Agility Testing Preparation for Law Enforcement</td>
<td></td>
</tr>
<tr>
<td>PE-F 52</td>
<td>Fitness and Conditioning for Law Enforcement</td>
<td></td>
</tr>
<tr>
<td>SPAN 66</td>
<td>Spanish for Fire and Police Personnel</td>
<td></td>
</tr>
</tbody>
</table>

**Desktop Publishing**

*Office Technology Department*

**Major 20711**

This program is intended to prepare students for employment following graduation. Training in a variety of computer skills is emphasized. This program will afford career opportunities in businesses desiring desktop publishing skills or in starting your own business. 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 Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSO 5</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP 1A</td>
<td>Computer Keyboarding, or</td>
<td></td>
</tr>
<tr>
<td>COMP 1</td>
<td>Computer Keyboarding</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 11</td>
<td>Internet Research for Business</td>
<td>2.0</td>
</tr>
<tr>
<td>COMP 60</td>
<td>Desktop Publishing with InDesign or Pagemaker, or</td>
<td></td>
</tr>
<tr>
<td>COMP 62</td>
<td>Desktop Publishing with QuarkXpress</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 63</td>
<td>Adobe Illustrator for Desktop Publishers, or</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 64</td>
<td>Desktop Publishing Seminar</td>
<td>2.5</td>
</tr>
<tr>
<td>COMP 65</td>
<td>Modifying Images for Desktop Publishing, or</td>
<td>4.0</td>
</tr>
<tr>
<td>GRAP 10</td>
<td>Photo Editing with Photoshop</td>
<td>3.0</td>
</tr>
<tr>
<td>PLUS</td>
<td>Select one (1) course from:</td>
<td></td>
</tr>
<tr>
<td>ADJI 1</td>
<td>The Administration of Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>ADJI 2</td>
<td>Principles and Procedures of the Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>ADJI 38</td>
<td>Narcotics Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>ADJI 59</td>
<td>Street Gangs and Law Enforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 35</td>
<td>Interviewing and Counseling in Corrections</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 40</td>
<td>Crime and Delinquency</td>
<td>3.0</td>
</tr>
<tr>
<td>CORS 45</td>
<td>The Violent Offender</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 19.5 - 25.0

**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:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 1</td>
<td>Child, Family and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development, or</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 14</td>
<td>Developmental Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 68</td>
<td>Children with Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>EDUC 10</td>
<td>Introduction to Education</td>
<td>3.0</td>
</tr>
<tr>
<td>EDUC 16</td>
<td>Aspects and Issues in Teaching Service Learning</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 71</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Total Units** 23.0

**Recommended Electives:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 51</td>
<td>Early Literacy in Child Development</td>
<td></td>
</tr>
<tr>
<td>CHLD 64</td>
<td>Health, Safety and Nutrition of Young Children</td>
<td></td>
</tr>
<tr>
<td>LIT 40</td>
<td>Children’s Literature</td>
<td></td>
</tr>
<tr>
<td>PE 3</td>
<td>First Aid and CPR</td>
<td></td>
</tr>
</tbody>
</table>

**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 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 universities in the CSU system. Many of the courses directly articulate 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.

**Programs Leading to an Associates Degree**

Coursework 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-based language is used to develop graphical user interfaces and to customize Windows.

**Requirements for the Major**

**Required core courses:**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 11</td>
<td>Basic Programming</td>
<td>4.0</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>
</tbody>
</table>

**Total Units** 44.0

**Professor: John H. Griesemer (209-802-6227)**

**Office: Building 110, Room 116A (209-802-6155)**

**Office Hours: 8:00AM-4:00PM (Monday-Friday)**

**Program Coordinator: John H. Griesemer**

**Office: Building 110, Room 116A**

**Phone: 209-802-6227**

**Office Hours: 8:00AM-4:00PM (Monday-Friday)**

**Program Department Chair: John H. Griesemer**

**Office: Building 110, Room 116A**

**Phone: 209-802-6227**

**Office Hours: 8:00AM-4:00PM (Monday-Friday)**

**Program Director: John H. Griesemer**

**Office: Building 110, Room 116A**

**Phone: 209-802-6227**

**Office Hours: 8:00AM-4:00PM (Monday-Friday)**
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 the Committee on Accreditation of Allied Health Education Programs (CAAHEP) and approved by the California Department of Health Services as meeting and exceeding the minimum standards as specified in Title 22 of the California Code of Regulations and the federal Department of Transportation national standard curriculum.

It is designed to train paramedics to work on ambulances and in the fire service.

**Requirements for the Major**

<table>
<thead>
<tr>
<th>Required courses:</th>
<th>Units</th>
<th>CSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 11: Technical Applications in 3.0</td>
<td></td>
<td>CSU</td>
</tr>
<tr>
<td>ELEC 12: Computer Simulation and Troubleshooting 2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 60: EMS Theory for Paramedics 8.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 40: Cardiology for Paramedics 5.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 20: Emergency Cardiac Care for Paramedics 1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 1: Fundamentals for Paramedics 2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 30: Pharmacology for Paramedics 2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 50: Paramedic Skills Competency 4.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 56: EMS Theory for Paramedics 8.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 70: Paramedic Clinical Internship 3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 80: Paramedic Field Externship 8.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>37.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Electives:**

- ADJU 1 The Administration of Justice System
- FIRE 1 Fire Protection Organization
- PSYC 1A Introduction to Psychology
- SOC 1 Sociology

The Emergency Medical Services faculty recommend that students complement their studies with selected elective courses chosen from the list above. Students should meet with a professor of Emergency Medical Services to help them determine which electives would best suit their career plans.

**Special Information:**

To remain in the program, students must maintain a grade of “C” (80%) or better in all courses, per state regulations. Before starting clinical rotations, students must pass a criminal background check.

Upon successful completion of the required courses, students are granted a Certificate of Completion for the Paramedic Program. Students are then eligible for licensure by taking and passing both the National Registry Exam and County Paramedic accreditation exam.

**Application Requirements:**

In addition to meeting Mt. San Antonio College academic 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 recognized EMS agency verifying completion of six (6) months of pre-hospital field experience as an EMT-I (approximately 1,200 hours) within the last two years.
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.

6. Successful completion of EMS 1, Fundamentals for Paramedics.

7. Forward two original 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.

**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 mathematics placement tests
4. Placement EMS-1, Fundamentals for Paramedics, and scores on college placement exam for English and math

---

**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 retraining 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.
### Programs Leading to an Associates Degree

#### Requirements for the Major

**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
- **EDT 20**: Technical Descriptive Geometry 3.0 CSU
- **EDT 24**: Engineering CAD 3-D Solids and Surfaces 3.0 CSU
- **EDT 26**: Civil Engineering Technology 3.0 CSU
- **EDT 28**: Engineering CAD 3-D – Illustration/Animation 3.0 CSU
- **ELEC 50A**: Electronics Theory 2.0 CSU
- **ELEC 50AL**: Electronics Laboratory 1.0 CSU
- **ELEC 50B**: Electronics Theory 2.0 CSU
- **ELEC 50BL**: Electronics Laboratory 1.0 CSU
- **MFG 11**: Manufacturing Processes I 2.0 CSU

**Total Units**: 37.0

**Recommended Electives:**
- **EDT 89**: Engineering Design Technology Work Experience
- **ENGR 8**: Properties of Materials

### 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 discuss transferability of courses.

**Requirements for the Major**

**Required courses:**
- **AGAG 1**: Food Production, Land Use and Politics — A Global Perspective 3.0 CSU
- **AGAG 59**: Work Experience in Agriculture, or 1.0
- **AGAG 60**: Work Experience in Agriculture, or 2.0
- **AGAG 61**: Work Experience in Agriculture, or 3.0
- **AGAG 62**: Work Experience in Agriculture 4.0
- **AGOR 51**: Tractor and Landscape Equipment Operations 3.0 CSU
- **AGOR 52**: Hydraulics 3.0 CSU
- **AGOR 53**: Small Engine Repair I 3.0 CSU
- **AGOR 54**: Small Engine Repair II 3.0 CSU
- **AGOR 55**: Diesel Engine Repair 3.0 CSU
- **AGOR 56**: Engine Diagnostics 3.0 CSU
- **AGOR 57**: Power Train Repair 3.0
- **AGOR 71**: Landscape Construction Fundamentals 3.0 CSU
- **AGOR 72**: Landscape Hardscape Applications 3.0 CSU
- **CISB 15**: Microcomputer Applications 4.0 CSU, UC

**Total Units**: 35.0 - 38.0

**Recommended Electives:**
- **BUSR 76**: Escrow Procedures I 3.0
- **BUSR 77**: Escrow Procedures II 3.0
- **CISB 15**: Microcomputer Applications 4.0 CSU, UC
- **COMP 1**: Computer Keyboarding 4.0 CSU

**Total Units**: 40.0

### 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.

**Required courses:**
- **BUSA 7**: Principles of Accounting – Managerial 3.0 CSU, UC, or
- **BUSA 7**: Bookkeeping – Accounting 5.0
- **BUSM 20**: Principles of Business 3.0 CSU, UC, or
- **BUSM 60**: Human Relations in Business 3.0 CSU
- **BUSM 66**: Small Business Management 3.0
- **BUSO 25**: Business Communications 3.0 CSU
- **BUSR 50**: Real Estate Principles 3.0 CSU
- **BUSR 51**: Legal Aspects of Real Estate 3.0
- **BUSR 53**: Real Estate Finance 3.0
- **BUSR 76**: Escrow Procedures I 3.0
- **BUSR 77**: Escrow Procedures II 3.0
- **CISB 15**: Microcomputer Applications 4.0 CSU, UC
- **COMP 1**: Computer Keyboarding 4.0 CSU

**Total Units**: 30.0

**Recommended Electives:**
- **BUSR 76**: Escrow Procedures I 3.0
- **BUSR 77**: Escrow Procedures II 3.0
- **CISB 15**: Microcomputer Applications 4.0 CSU, UC
- **COMP 1**: Computer Keyboarding 4.0 CSU

**Total Units**: 40.0

**Family and Consumer Sciences**

**Family and Consumer Sciences Department 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.

**Required courses:**
- **CHLD 10**: Child Growth and Development, or 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, or 3.0 CSU, UC
- **BUSR 76**: Escrow Procedures I 3.0
- **BUSR 77**: Escrow Procedures II 3.0
- **CISB 15**: Microcomputer Applications 4.0 CSU, UC
- **COMP 1**: Computer Keyboarding 4.0 CSU

**Total Units**: 30.0

**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

**Family and Consumer Sciences Department**

**Major 21320**

Exciting 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 and the transfer institution.

**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 Fundamentals 3.0 CSU
- **FASH 12**: Advanced Clothing 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**: Basic Patternmaking 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 90**: Field Studies
- **FASH 91**: Field Studies – New York
- **FASH 92**: Field Studies – Fashion Capitals
- **FCS 41**: Life Management
- **FASH 20, FASH 23**: FASH 90, FASH 91, and FASH 95 may be taken two times for credit.
**Fashion Merchandising**

Family and Consumer Sciences Department  
Major 21308  
This program is intended to prepare students for employment in the fashion industry. A variety of career opportunities are available in retail merchandising, manufacturing, fashion, promotion, and self-employment. 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 8</td>
<td>Introduction to Fashion</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 9</td>
<td>History of Costume and Fashion</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 10</td>
<td>Clothing Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 15</td>
<td>Fashion Strategies</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 17</td>
<td>Textiles</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 30</td>
<td>Fashion Design and Product Development I</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 62</td>
<td>Retail Store Management and Merchandising (gr)</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSS 50</td>
<td>Retail Store Management and Merchandising</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 63</td>
<td>Advertising and Promotion (gr)</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSS 33</td>
<td>Advertising and Promotion</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 66</td>
<td>Visual Merchandising Display</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 27.0

**Recommended Electives:**

- BUSS 36 Principles of Marketing
- FASH 25 Fashion Computer-Assisted Drawing
- FASH 90 Field Studies
- FASH 91 Field Studies - New York
- FASH 92 Field Studies - Fashion Capitals
- FCS 41 Life Management
- FCS 91 Work Experience in Family and Consumer Sciences
- FCS 92 Work Experience in Family and Consumer Sciences

FASH 90 and FASH 92 may be taken two times for credit.

---

**Fire Technology**  
Fire Technology Department  
Major 22105  
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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| 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   |  
| PLUS        | Select two (2) courses from:                     |       |  
| EMT 90      | Emergency Medical Technician I                    | 9.0   |  
| FIRE 7      | Fire Fighting Tactics and Strategy                | 3.0   | CSU  
| FIRE 8      | Fire Company Organization and Management          | 3.0   | CSU  
| 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 86     | Basic Fire Academy                                | 12.0  |  
| PE-F 53     | Physical Training for the Basic Fire Academy      | 2.5   | CSU  

**Total Units** 23.5 - 39.0

**Recommended Electives:**

- FIRE 20 Fire Instructor 1A 2.0  
- FIRE 21 Fire Instructor 1B 2.0  
- FIRE 41 Fire Prevention 1B 2.0  
- PLUS  
- SPAN 66 Spanish for Fire and Police Personnel 18.5

**Fire Technology — Administrative Communications**  
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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| BUSA 7      | Principles of Accounting — Financial             | 5.0   | CSU, UC  
| CISB 11     | Computer Information Systems                      | 3.5   | CSU, UC  
| CSP 11      | Basic Programming                                 | 4.0   | CSU, UC  
| FIRE 1      | Fire Protection Organization                      | 3.0   | CSU, UC  
| FIRE 8      | Fire Company Organization and Management          | 3.0   | CSU, UC  
| FIRE 30     | Fire Management 1                                 | 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 — 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| BUSA 7      | Principles of Accounting — Financial             | 5.0   | CSU, UC  
| CISB 11     | Computer Information Systems                      | 3.5   | CSU, UC  
| FIRE 1      | Fire Protection Organization                      | 3.0   | CSU, UC  
| FIRE 2      | Fire Prevention Technology                        | 3.0   | CSU, UC  
| FIRE 8      | Fire Company Organization and Management          | 3.0   | CSU, UC  
| FIRE 40     | Fire Prevention 1A                                | 2.0   |  
| FIRE 41     | Fire Prevention 1B                                | 2.0   |  

**Total Units** 21.5

---

**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.
### Programs Leading to an Associates Degree

**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

**Plus the following 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** 35.0

**Recommended Electives:**
- FIRE 7 Fire Fighting Tactics and Strategy 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** 34.0

**Recommended Electives:**
- EMT 90 Emergency Medical Technician I 2.0
- FIRE 40 Fire Prevention 1A 2.0
- FIRE 41 Fire Prevention 1B 2.0
- FIRE 51 Fire Command 1A 2.0
- FIRE 60 Fire Investigation 1A 2.0
- FIRE 61 Fire Investigation 1B 2.0
- PE-F 50 Physical Skills Preparation for Law Enforcement and Fire Science 2.0
- PE-F 51 Agility Testing Preparation for Law Enforcement and Fire Science 2.0
- PE-F 52 Fitness and Conditioning for Law Enforcement, Fire Science and Forestry 2.0
- SPAN 66 Spanish for Fire and Police Personnel 2.0

**Total Units** 33.0

**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 10 Arson and Fire Investigation 3.0 CSU
- FIRE 11 Fire Company Organization and Management 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 2.0
- FIRE 10 Arson and Fire Investigation 2.0
- FIRE 30 Fire Management 1 2.0
- FIRE 50 Fire Command 1A 2.0
- FIRE 51 Fire Command 1B 2.0
- PE-F 50 Physical Skills Preparation for Law Enforcement and Fire Science 2.0
- PE-F 51 Agility Testing Preparation for Law Enforcement and Fire Science 2.0
- PE-F 52 Fitness and Conditioning for Law Enforcement, Fire Science and Forestry 2.0
- SPAN 66 Spanish for Fire and Police Personnel 2.0

**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 intend to 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.**

**Fire Technology Department Major 22112**

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
Requirements for the Major

Required courses:

- AGAG 1 Food Production, Land Use and Politics – A Global Perspective 3.0 CSU, UC
- AGOR 1 Horticultural Science 3.0 CSU
- AGOR 2 Plant Propagation/Greenhouse Management 3.0 CSU
- AGOR 3 Landscape Design 3.0 CSU
- AGOR 5 Interior Landscaping 3.0 CSU
- AGOR 25 Floral Design I 3.0 CSU
- AGOR 26 Floral Design II 3.0 CSU
- AGOR 27 Floral Design III 3.0 CSU
- AGOR 29 Ornamental Plants – Herbs 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, Jr 1.0
- AGOR 92 Work Experience in Nursery Operations, Sr 2.0
- AGOR 93 Work Experience in Nursery Operations 3.0
- AGOR 94 Work Experience in Nursery Operations 4.0
- CAG 15 Microcomputer Applications 4.0 CSU, UC

Total Units 38.0 - 41.0

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 60 Human Relations in Business 3.0 CSU
- BUSM 61 Business Organization and Management 3.0 CSU
- BUSM 62 Human Resource Management 3.0 CSU
- BUSS 5 Business English 3.0 CSU
- BUSO 25 Business Communications 3.0 CSU
- BUSO 36 Principles of Marketing 3.0 CSU
- CAG 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
- CAG 15 Microcomputer Applications 2.0 - 4.0 CSU, UC

Total Units 42.0

Histologic Technician Training

Biological Sciences Department Major 21211

This program provides on-campus and on-site technical training in the field 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:

- ANAT 108 Introductory Human Histology or Anatomy 4.0 CSU, UC
- ANAT 36 Human Physiology 5.0 CSU, UC
- ANAT 35 Human Anatomy 5.0 CSU, UC
- CHEM 10 Chemistry for Allied Health Majors, Jr 4.0 CSU, UC
- CHEM 50 General Chemistry I 5.0 CSU, UC
- HT 1 Introduction to Histotechnology 1.0
- HT 2 Scientific Basics for Histologic Technicians 3.0
- HT 10 Histology 3.0
- HT 12 Beginning Histotechniques 4.0
- HT 14 Advanced Histotechniques 4.0
- HT 16 Histochemistry/Immunohistochemistry 4.0

PLUS

Select four (4) units from:

- HT 17 Work Experience in Histotechnology 1.0
- HT 18 Work Experience in Histotechnology 2.0
- HT 19 Work Experience in Histotechnology 3.0
- HT 20 Work Experience in Histotechnology 4.0

Total Units 40.0 - 43.0

Horse Ranch Management

Agricultural Sciences Department Major 20102

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 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.

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 or faculty advisor 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 or counselor or advisor to discuss transfer options.

Requirements for the Major

Required courses:

- AGAG 1 Food Production, Land Use and Politics – A Global Perspective 3.0 CSU, UC
- AGAG 2 Plant Propagation/Greenhouse Management 3.0 CSU
- AGOR 1 Horticultural Science 3.0 CSU
- AGOR 2 Plant Propagation/Greenhouse Management 3.0 CSU
- AGOR 3 Landscape Design 3.0 CSU
- AGOR 5 Interior Landscaping 3.0 CSU
- AGOR 25 Floral Design I 3.0 CSU
- AGOR 26 Floral Design II 3.0 CSU
- AGOR 27 Floral Design III 3.0 CSU
- AGOR 29 Ornamental Plants – Herbs 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, Jr 1.0
- AGOR 92 Work Experience in Nursery Operations, Sr 2.0
- AGOR 93 Work Experience in Nursery Operations 3.0
- AGOR 94 Work Experience in Nursery Operations 4.0
- CAG 15 Microcomputer Applications 4.0 CSU, UC

Total Units 38.0 - 41.0

Hospitality and Restaurant Management

Family and Consumer Sciences Department 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.
Programs Leading to an Associates Degree

Requirements for the Major

**Required courses:**

- HRM 51 Introduction to Hospitality 3.0 CSU
- HRM 52 Food Safety and Sanitation 1.5 CSU
- HRM 53 Dining Room Service 3.0 CSU
- HRM 54 Commercial Food Preparation 3.0 CSU
- HRM 56 Management of Hospitality Personnel and Operations 3.0 CSU
- HRM 57 Restaurant Cost Control 3.0 CSU
- HRM 64 Hospitality Financial Accounting I 3.0 CSU
- HRM 66 Hospitality Law 3.0 CSU
- HRM 70 Introduction to Lodging 3.0 CSU

**PLUS**

Select three (3) units from:

- HRM 61 Menu Planning 3.0 CSU
- HRM 62 Catering 3.0 CSU
- HRM 93 Work Experience in Restaurant/Hospitality 3.0 CSU
- NF 20 Principles of Foods with Lab 3.0 CSU

**Total Units 28.0**

**Recommended Electives:**

- HRM 91 Work Experience in Restaurant/Hospitality 3.0 CSU
- HRM 92 Work Experience in Restaurant/Hospitality 3.0 CSU
- HRM 94 Work Experience in Restaurant/Hospitality 3.0 CSU

**Human Resource Management**

Accounting and Management Department Major 20530

The Human Resource Major and Certificate are 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 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:**

- ANTH 22 General Cultural Anthropology 3.0 CSU, UC
- BUSA 70 Payroll and Tax Accounting 3.0
- BUSL 19 Advanced Business Law 3.0 CSU, UC
- 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 25 Business Communications 3.0 CSU
- CISB 15 Microcomputer Applications 4.0 CSU, UC

**Total Units 28.0**

**Interior Design**

Family and Consumer Sciences Department 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:**

- ARCH 11 Architectural Drawing 3.0 CSU, UC
- ARCH 13 Architectural Illustration 3.0 CSU, UC
- ARCH 15 Architectural Working Drawings – I 3.0 CSU
- ARCH 16 Basic CAD and Computer Application 4.0 CSU, UC
- BUSS 35 Professional Selling 3.0 CSU
- ID 100 Fundamentals of Interior Design 3.0 CSU
- ID 105 Interior Design Studio I 2.0 CSU
- ID 120 Interior Design Careers 2.0 CSU
- ID 130 Applied Color and Design Theory 4.0 CSU
- ID 150 Interior Materials and Products 4.0 CSU
- ID 170 Space Planning 3.0 CSU
- ID 180 History of Interior Architecture & Furnishings I 3.0 CSU
- ID 190 History of Interior Architecture & Furnishings II 3.0 CSU
- ID 210 Fundamentals of Lighting 3.0
- ID 215 Interior Design Studio II 2.0 CSU
- ID 230 Business and Professional Practice 3.0
- ID 240A Interior Design Internship Seminar, and 1.0
- ID 240B Interior Design Internship 1.0

**Total Units 50.0**

**Recommended Electives:**

- ARCH 23 Architectural Presentations
- ARTD 15A Drawing: Beginning
- BUSA 72 Bookkeeping – Accounting
- BUSM 52 Principles of Exporting and Importing
- BUSM 53 Principles of International Business

**Total Units 56.0**

**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 transferability of courses.

**Requirements for the Major**

**Required courses:**

- BUSL 20 International Business Law 3.0
- BUSM 20 Principles of Business 3.0 CSU, UC
- BUSM 50 World Culture: A Business Perspective, or ANTH 22 General Cultural Anthropology 3.0 CSU, UC
- BUSM 51 Principles of International Business 3.0
- BUSM 52 Principles of Exporting and Importing 3.0
- ID 108 History of Interior Architecture & Furnishings I 3.0 CSU
- ID 190 History of Interior Architecture & Furnishings II 3.0 CSU
- ID 210 Fundamentals of Lighting 3.0
- ID 215 Interior Design Studio II 2.0 CSU
- ID 230 Business and Professional Practice 3.0
- ID 240A Interior Design Internship Seminar, and 1.0
- ID 240B Interior Design Internship 1.0

**Total Units 50.0**

**Recommended Electives:**

- ARCH 13 Architectural Illustration
- ARCH 23 Architectural Presentations
- BUSA 72 Bookkeeping – Accounting
- BUSM 60 Human Relations in Business
- BUSM 66 Small Business Management
- BUSM 67 Professional Selling
- BUSM 50 Retail Store Management and Merchandising
PROGRAMS LEADING TO AN ASSOCIATES DEGREE

BSCM 61 Business Organization and Management 3.0 CSU
BSCM 66 Small Business Management 3.0
BSCM 36 Principles of Marketing 3.0 CSU

PLUS
Select one (1) course from:
BSCM 70 International Marketing Concepts 3.0

Required courses:

ADJU 68 Administration of Justice System 3.0
ADJU 6 Principles 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 Street Gangs and Law Enforcement 3.0
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 3.0
PE-F 51 Agility Testing Preparation for Law Enforcement and Fire Science 3.0
PE-F 52 Fitness and Conditioning for Law Enforcement, Fire Science and Forestry 3.0
SPAN 66 Spanish for Fire and Police Personnel 3.0

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.

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
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. A physical examination, including specific immunizations is required of all candidates prior to beginning of nursing classes.
7. Current Level C-Provider CPR certification
8. Criminal background check
9. Nursing 70 Role Transition must be completed with a credit grade prior to entrance into the program. 
10. Applicants must complete 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 Nursing Required courses:

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 Preceptorship in Nursing 2.0 CSU

Total Units 28.0

Requirements for the Major:

*ANAT 35 Human Anatomy, or equivalent, and
*ANAT 36 Human Physiology, or equivalent, or
*ANAT 10A Introductory Human Anatomy, or equivalent, and
*ANAT 10B Introductory Human Physiology, or equivalent, and

MICR 1 Principles of Microbiology, or equivalent, or
MICR 22 Microbiology, or equivalent, and
ENGL 1A Freshman Composition, and
CHLD 10 Child Growth and Development, or
PSYC 14 Developmental Psychology
PSYC 1A Introduction to Psychology
SPCH 1A Public Speaking

Total Units 24.0 - 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 AS degree. Contact the Counseling Department or Advising Center 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 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:

1. Once a student has completed all course prerequisites, they may request an appointment with a counselor or educational advisor.
2. Students who have completed coursework at other colleges must bring the following information to their eligibility appointment:
   a. Official transcripts of all college work completed at all colleges;
   b. If the prerequisite courses were completed at another college, a course description and a copy of the course’s syllabus;
   c. Students completing college coursework outside of the United will need to have their transcripts evaluated by an approved international transcript.
Programs Leading to an Associates Degree

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).

d. All students will need to bring official proof of high school graduation, GED, or college graduation from an accredited institution in the United States.

Appointments for Eligibility Verification will only be made during the Following Months:
September 1 - November 30
March 1 - May 30

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, 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 judgment/action which could result in death of a patient
- 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 for others.

Livestock Management
Agricultural Sciences Department
Major 20103

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 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.

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, 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 or faculty 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:
AGAG 20 Food Production, Land Use and Politics – A Global Perspective 3.0 CSU, UC
AGAG 59 Work Experience in Agriculture, or 1.0
AGAG 60 Work Experience in Agriculture, or 2.0
AGAG 61 Work Experience in Agriculture, or 3.0
AGAG 62 Work Experience in Agriculture 4.0
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 53 Small Engine Repair I 3.0 CSU
AGOR 71 Landscape Construction 3.0 CSU
BUSB 20 Principles of Business 3.0 CSU, UC
BUSB 66 Small Business Management 3.0
BUSB 35 Professional Selling 3.0 CSU
BUSB 36 Principles of Marketing 3.0 CSU

Total Units 43.0 - 46.0

Manufacturing Technology

This curriculum is designed to prepare the student for entrance into the manufacturing field in one of the machining occupations, such as machinist (manual, NC, and CAD/CAM), or machinist apprentice.

Graduates may enter the manufacturing field in areas dealing with production, research and development, tool and die construction, mold making, or computerized manufacturing. Laboratory practice utilizes industrial types of equipment and precision measuring instruments to provide training in the various machining occupations. Setup and tooling procedures and part verification upon completion of the metal removing process are covered. Instruction on all types of lathes, mills, grinders, and specialized equipment such as EDM and CNC is included. Supplementary instruction is also provided in bench work, layout, inspection process, blueprint reading, metal composition, heat treatment, assembly procedures, jig and fixture design, and construction.

Requirements for the Major

Required courses:
BUSA 7 Principles of Accounting – Financial, or 5.0 CSU, UC
BUSA 72 Bookkeeping – Accounting 5.0
BUSB 20 Principles of Business 3.0 CSU, UC
BUSB 61 Business Organization and Management 3.0 CSU
BUSB 25 Business Communications 3.0 CSU
BUSB 35 Professional Selling 3.0 CSU
Requirements for the Major

Degree. The Psychiatric Technology Program will prepare students for Psychiatric Technicians Clinical

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. The student will qualify to take the California State Board Examination upon completion of all the above courses, except MENT 82.

Entrance Requirements and Selection Procedures:

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 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:

- 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.)
- Be at least 18 years of age.
- File a college application and be accepted as a student at Mt. San Antonio College.
- Submit an application for the Mental Health/Psychiatric Technician Program to the Technology and Health Division Office. A program begins each fall and spring semester.
- 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.
- 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.
- 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

- 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 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 a part of this physical examination. Proof of high school graduation and malpractice insurance are required of all candidates upon acceptance.
- Certain convictions may prevent a candidate from being licensed as a Psychiatric Technician.
- 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.

Nursing

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 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.

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.
Regarding Licensure:
The California Board of Registered Nursing (BRN) protects the consumer by screening applicants for licensure in order to identify potentially unsafe practitioners. The BRN may deny applications for interim permits, temporary licenses, and permanent licensure, if the applicant has been found guilty of dishonesty, fraud or deceit, felony child abuse, sex offend crimes, acts involving narcotics, dangerous drugs or devices, assault and/or battery, and other crimes. Applicants who have questions regarding limitations related to licensure should contact the California Board of Registered Nursing at (916) 322-3350 or access its website at www.rn.ca.gov.

Requirements for Nursing

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 1A The Nursing Process I</td>
<td>4.7</td>
<td>Introduction to Nursing Education</td>
</tr>
<tr>
<td>NURS 1B The Nursing Process II</td>
<td>4.7</td>
<td>Introduction to Nursing Education</td>
</tr>
<tr>
<td>NURS 2 Pharmacology</td>
<td>2.0</td>
<td>Pharmacology for Nursing Practice</td>
</tr>
<tr>
<td>NURS 3 Medical-Surgical Nursing</td>
<td>3.5</td>
<td>Medical-Surgical Nursing</td>
</tr>
<tr>
<td>NURS 4 Maternity Nursing</td>
<td>3.0</td>
<td>Maternity Nursing</td>
</tr>
<tr>
<td>NURS 5 Psychiatric Nursing</td>
<td>3.0</td>
<td>Psychiatric Nursing</td>
</tr>
<tr>
<td>NURS 6 Pediatric Nursing</td>
<td>3.0</td>
<td>Pediatric Nursing</td>
</tr>
<tr>
<td>NURS 7 Medical-Surgical Nursing</td>
<td>7.0</td>
<td>Medical-Surgical Nursing</td>
</tr>
<tr>
<td>NURS 8 Medical-Surgical Nursing</td>
<td>5.0</td>
<td>Medical-Surgical Nursing</td>
</tr>
<tr>
<td>NURS 9 Leadership in Nursing</td>
<td>1.0</td>
<td>Leadership in Nursing</td>
</tr>
<tr>
<td>NURS 10 Medical-Surgical Nursing</td>
<td>4.0</td>
<td>Medical-Surgical Nursing</td>
</tr>
<tr>
<td>NURS 11 Preceptorship in Nursing</td>
<td>2.0</td>
<td>Preceptorship in Nursing</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>43.0</td>
<td></td>
</tr>
</tbody>
</table>

Requirements for the Major:

*ANAT 35 Human Anatomy, or equivalent, and
ANAT 36 Human Physiology, or equivalent, or
ANAT 10A Introductory Human Anatomy, or equivalent, and
ANAT 10B Introductory Human Physiology, or equivalent, and
MICR 1 Principles of Microbiology, or equivalent, or
MICR 22 Microbiology, or equivalent, and
ENGL 1A Freshman Composition, and

Programs Leading to an Associates Degree

7. Current Level C-Provider CPR certification

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).

Eligibility for entering the Nursing Admission Lottery will be based on the following performance criteria:

- A grade point average of 2.5 in Human Anatomy, Human Physiology and Microbiology. Each course must be completed with a minimum grade of "C" and no more than one repetition of one course.
- English composition must be completed with a grade of "C" or higher;
- A minimum cumulative grade point average of 2.5, in all college coursework completed at the time of certification;
- Students must have eligibility to enroll in MATH 51, Elementary Algebra.

The Eligibility Appointment:

1. Once a student has completed all course prerequisites, they may request an appointment with a counselor or educational advisor.
2. 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).

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 flames, flammable 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 judgment/action which could result in death of a patient
- 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 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, arboretum and botanic gardens, arboriculture, 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 all courses provide hands-on experience and are designed to give the student combination of practical skills and technical knowledge. Students who intend to transfer should meet with a counselor or advisor to check the
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>AGOR 1</td>
<td>Horticultural Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 2</td>
<td>Plant Propagation/Greenhouse Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 3</td>
<td>Landscape Design</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 4</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 5</td>
<td>Ornamental Plants – Herbs</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 6</td>
<td>Ornamental Plants – Trees and Woody Shrubs</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 7</td>
<td>Landscaping and Nursery Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 8</td>
<td>Turf Grass Production and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 9</td>
<td>Soil Science and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 10</td>
<td>Landscape Irrigation – Design and Installation</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 11</td>
<td>Landscape Construction Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 12</td>
<td>Work Experience in Nursery Operations, gr</td>
<td>1.0</td>
</tr>
<tr>
<td>AGOR 13</td>
<td>Work Experience in Nursery Operations, gr</td>
<td>2.0</td>
</tr>
<tr>
<td>AGOR 14</td>
<td>Work Experience in Nursery Operations, gr</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 15</td>
<td>Work Experience in Nursery Operations, gr</td>
<td>4.0</td>
</tr>
</tbody>
</table>

PLUS

Select six (6) units from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 16</td>
<td>Interior Landscaping</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 17</td>
<td>Floral Design I</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 18</td>
<td>Floral Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 19</td>
<td>Sports Turf Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 20</td>
<td>Tractor and Landscape Equipment Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 21</td>
<td>Small Engine Repair I</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 22</td>
<td>Landscape Irrigation Systems Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 23</td>
<td>Landscape Hardscape Applications</td>
<td>3.0</td>
</tr>
</tbody>
</table>

AGOR 75 Urban Arboriculture                               3.0
CSB 15 Microcomputer Applications                          4.0 CSU, UC

**Total Units 43.0 - 46.0**

**Paralegal/Legal — Bankruptcy Specialty Business Administration Department Major 21401**

The Paralegal/Legal – Bankruptcy 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 Specialty 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 core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSL 30</td>
<td>Introduction to Paralegal/Legal</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 31A</td>
<td>Legal Analysis and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 31B</td>
<td>Advanced Legal Analysis and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 33A</td>
<td>Civil Procedure Pretrial</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 33B</td>
<td>Civil Procedure-Trial and Post-Trial</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 35A</td>
<td>Law Office Procedures</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units 38.0**

The Paralegal/Legal faculty recommend that students complement their studies with selected elective courses, including BUSL 36 – Paralegal Internship. Students should meet with a professor of the Paralegal/Legal program to help them determine which electives would best suit their career plans.

**Special Information:**

The ABA does not recognize the following courses as meeting its definition of General Education: ARTB 14, ARTD 15A, ARTD 17A, ARTD 20, ARTD 25A, ARTS 30A, ARTS 40A, THTR 11, MUS 7, AD 3 and COUN 5. Students developing their educational plan should select another course from the Mt.SAC General Education area which will satisfy that area’s General Education requirement.

**Paralegal/Legal — Corporations/ Business Specialty Business Administration Department Major 21405**

The Paralegal/Legal – Corporations/Business 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 American Bar Association has reviewed the Paralegal/Legal Specialty 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 core courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSL 30</td>
<td>Introduction to Paralegal/Legal</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 31A</td>
<td>Legal Analysis and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 31B</td>
<td>Advanced Legal Analysis and Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 33A</td>
<td>Civil Procedure Pretrial</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 33B</td>
<td>Civil Procedure-Trial and Post-Trial</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 35A</td>
<td>Law Office Procedures</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units 38.0**

The Paralegal/Legal faculty recommend that students complement their studies with selected elective courses, including BUSL 36 – Paralegal Internship. Students should meet with a professor of the Paralegal/Legal program to help them determine which electives would best suit their career plans.

**Special Information:**

The ABA does not recognize the following courses as meeting its definition of General Education: ARTB 14, ARTD 15A, ARTD 17A, ARTD 20, ARTD 25A, ARTS 30A, ARTS 40A, DRMA 11, MUS 7, AD 3 and COUN 5. Students developing their educational plan should select another course from the Mt.SAC General Education area which will satisfy that area’s General Education requirement.
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 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 Specialty Program has been granted approval by the American Bar Association.

Requirements for the Major

<table>
<thead>
<tr>
<th>Required courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSL 30</td>
<td>Introduction to Paralegal/Legal</td>
</tr>
<tr>
<td>BUSL 31A</td>
<td>Legal Analysis and Writing</td>
</tr>
<tr>
<td>BUSL 31B</td>
<td>Advanced Legal Analysis and Writing</td>
</tr>
<tr>
<td>BUSL 33A</td>
<td>Civil Procedure Pretrial</td>
</tr>
<tr>
<td>BUSL 33B</td>
<td>Civil Procedure-Trial and Post-Trial</td>
</tr>
<tr>
<td>BUSL 35A</td>
<td>Law Office Procedures</td>
</tr>
<tr>
<td>BUSL 35B</td>
<td>Automated Law Office Procedures</td>
</tr>
<tr>
<td>BUSL 37</td>
<td>Tort Law</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plus the following courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSL 31C</td>
<td>Legal Analysis and Writing</td>
</tr>
<tr>
<td>BUSL 31D</td>
<td>Advanced Legal Analysis and Writing</td>
</tr>
<tr>
<td>BUSL 33A</td>
<td>Civil Procedure Pretrial</td>
</tr>
<tr>
<td>BUSL 33B</td>
<td>Civil Procedure-Trial and Post-Trial</td>
</tr>
<tr>
<td>BUSL 35A</td>
<td>Law Office Procedures</td>
</tr>
<tr>
<td>BUSL 35B</td>
<td>Automated Law Office Procedures</td>
</tr>
<tr>
<td>BUSL 37</td>
<td>Tort Law</td>
</tr>
</tbody>
</table>

| Total Units | 38.0 |

Recommended Electives:
The Paralegal/Legal faculty recommend that students complete their studies with selected elective courses, including BUSL 36 — Paralegal Internship. Students should meet with a professor of the Paralegal/Legal program to help them determine which electives would best suit their career plans.

Special Information:
The ABA does not recognize the following courses as meeting its definition of General Education: ARTB 14, ARTD 15A, ARTD 17A, ARTD 20, ARTD 25A, ARTS 30A, ARTS 40A, THTR 11, MUS 7, AD 3, CSU, and COUN 5. Students developing their educational plan should select another course from the Mt.SAC General Education area which will satisfy that area's General Education requirements.

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 Specialty Program has been granted approval by the American Bar Association.

Requirements for the Major

<table>
<thead>
<tr>
<th>Required courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSL 30</td>
<td>Introduction to Paralegal/Legal</td>
</tr>
<tr>
<td>BUSL 31A</td>
<td>Legal Analysis and Writing</td>
</tr>
<tr>
<td>BUSL 31B</td>
<td>Advanced Legal Analysis and Writing</td>
</tr>
<tr>
<td>BUSL 33A</td>
<td>Civil Procedure Pretrial</td>
</tr>
<tr>
<td>BUSL 33B</td>
<td>Civil Procedure-Trial and Post-Trial</td>
</tr>
<tr>
<td>BUSL 35A</td>
<td>Law Office Procedures</td>
</tr>
<tr>
<td>BUSL 35B</td>
<td>Automated Law Office Procedures</td>
</tr>
<tr>
<td>BUSL 37</td>
<td>Tort Law</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plus the following courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSL 31C</td>
<td>Legal Analysis and Writing</td>
</tr>
<tr>
<td>BUSL 31D</td>
<td>Advanced Legal Analysis and Writing</td>
</tr>
<tr>
<td>BUSL 33A</td>
<td>Civil Procedure Pretrial</td>
</tr>
<tr>
<td>BUSL 33B</td>
<td>Civil Procedure-Trial and Post-Trial</td>
</tr>
<tr>
<td>BUSL 35A</td>
<td>Law Office Procedures</td>
</tr>
<tr>
<td>BUSL 35B</td>
<td>Automated Law Office Procedures</td>
</tr>
<tr>
<td>BUSL 37</td>
<td>Tort Law</td>
</tr>
</tbody>
</table>

| Total Units | 38.0 |

Recommended Electives:
The Paralegal/Legal faculty recommend that students complete their studies with selected elective courses, including BUSL 36 — Paralegal Internship. Students should meet with a professor of the Paralegal/Legal program to help them determine which electives would best suit their career plans.

Special Information:
The ABA does not recognize the following courses as meeting its definition of General Education: ARTB 14, ARTD 15A, ARTD 17A, ARTD 20, ARTD 25A, ARTS 30A, ARTS 40A, THTR 11, MUS 7, AD 3, CSU, and COUN 5. Students developing their educational plan should select another course from the Mt.SAC General Education area which will satisfy that area's General Education requirements.
The courses in park and sports turf management are 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 or the transfer should meet with a counselor or advisor to check the lower division requirements in the catalog or the

**Requirements for the Major**

**Required courses:**

- AGAG 1 Food Production, Land Use and Politics – A Global Perspective 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 CSU
- 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
- AGOR 75 Urban Arboriculture 3.0
- 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 4.0
- CISB 15 Microcomputer Applications 4.0 CSU, UC

**Total Units 44.0 - 47.0**

**Photography**

Photographics Department Major 21002

The 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 an advisor or catalog of the institution they wish to attend regarding transferability of courses.

**Requirements for the Major**

**Required courses:**

- GRAP 10 Photo Editing with Photoshop 3.0
- PHOT 10 Basic Digital and Film Photography 3.0 CSU, UC

**Total Units 34.0**

**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 or the college or university they will attend and also the semester and year in which courses are offered.

**Photography**

Photographics Department 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 an advisor or catalog of the institution they wish to attend regarding transferability of courses.

**Requirements for the Major**

**Required courses:**

- GRAP 10 Photo Editing with Photoshop 3.0
- PHOT 10 Basic Digital and Film Photography 3.0 CSU, UC

**Total Units 34.0**
### Programs Leading to an Associates Degree

#### Programs Leading to an Associates Degree

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>2.</strong></td>
<td>A cumulative grade point average (GPA) of 2.5 for all college coursework completed.</td>
</tr>
<tr>
<td><strong>3.</strong></td>
<td>Eligibility for MATH 51.</td>
</tr>
<tr>
<td><strong>4.</strong></td>
<td>High school graduation or GED or academic degree from an accredited college/university in the United States.</td>
</tr>
<tr>
<td><strong>5.</strong></td>
<td>Possess a current California Psychiatric Technician License.</td>
</tr>
<tr>
<td><strong>6.</strong></td>
<td>Criminal background check and drug screening must be completed prior to any patient contact.</td>
</tr>
<tr>
<td><strong>7.</strong></td>
<td>A physical examination, including specific immunizations is required of all candidates prior to the beginning of nursing classes.</td>
</tr>
<tr>
<td><strong>8.</strong></td>
<td>Current Level C-Provider CPR certification.</td>
</tr>
<tr>
<td><strong>9.</strong></td>
<td>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 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 Psychiatric Technician License, physical, CPR card, Background Check, and drug test prior to the start of class.)</td>
</tr>
</tbody>
</table>

#### Psychiatric Technician to RN Career Mobility

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.

### 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.

### Requirements for Nursing

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 3 Medical-Surgical Nursing</td>
<td>3.5 CSU</td>
</tr>
<tr>
<td>Locomotion/Sensation</td>
<td>Integument/Oncology/Immunology</td>
</tr>
<tr>
<td>NURS 4 Maternity Nursing</td>
<td>3.0 CSU</td>
</tr>
<tr>
<td>NURS 6 Pediatric Nursing</td>
<td>3.0 CSU</td>
</tr>
<tr>
<td>NURS 7 Medical-Surgical Nursing</td>
<td>7.0 CSU</td>
</tr>
<tr>
<td>Nutrition/Elimination/Surgical Asepsis</td>
<td></td>
</tr>
<tr>
<td>NURS 8 Medical-Surgical Nursing</td>
<td>5.0 CSU</td>
</tr>
<tr>
<td>Circulation and Oxygenation</td>
<td></td>
</tr>
<tr>
<td>NURS 9 Leadership in Nursing</td>
<td>1.0 CSU</td>
</tr>
<tr>
<td>NURS 10 Preceptorship in Nursing</td>
<td>2.0 CSU</td>
</tr>
<tr>
<td>Total Units</td>
<td>28.5</td>
</tr>
</tbody>
</table>

**Prerequisites for the Major:**

- **ANAT 35** Human Anatomy, or equivalent, and
- **ANAT 36** Human Physiology, or equivalent, or
- **ANAT 10A** Introductory Human Anatomy, or equivalent, and
- **ANAT 10B** Introductory Human Physiology, or equivalent, and
- **MICR 1** Principles of Microbiology, or equivalent, or
- **MICR 22** Microbiology, or equivalent, and

**Total Units** 24.0 - 27.0

### 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 the Counseling Department or Advising Center 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:

1. Once a student has completed all course prerequisites, they may request an appointment with a counselor or educational advisor.

2. 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).**

### Appointment Verifications:

**Appointments for Eligibility Verification will only be made during the Following Months:**

- September 1 - November 30
- March 1 - May 30

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.
Radio Broadcasting: Behind the Scenes
Art Department
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 01 Introduction to Broadcasting 3.0 CSU
- R-TV 09 Broadcast Sales and Promotion 3.0
- 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 12 Commercial Copywriting 3.0
- R-TV 15 Broadcast Business Practices 3.0
- R-TV 16 Broadcast Career Preparation 3.0
- R-TV 97A Radio Broadcasting Seminar 1.0
- R-TV 97B Radio Broadcasting Internship 1.0

PLUS
Select six (6) units from:
- R-TV 03 Sportscasting and Reporting 1.5
- R-TV 04 Broadcast News Field Reporting 3.0
- R-TV 05 Radio and Television Newswriting 3.0
- R-TV 06 Broadcast Traffic Reporting 1.5
- R-TV 08 KSAK Radio Studio Operations 2.0 CSU

Radio Broadcasting: On the Air
Art Department
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 Entertainment Industry Internship – KSAK Radio, or
- R-TV 97D Entertainment Industry Internship – KSAK Radio

PLUS
Select six (6) 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 KSAK 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

Recommended Electives:
- ANIM 115 Storyboarding

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 to be certified radiologic technologists. Students will gain knowledge and understanding of the diagnostic uses of x-ray, as well as the technical skills to use x-ray equipment in both laboratory and clinical 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.

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

Upon completion of the Associate in Science Degree in Radiologic Technology, graduates are eligible to apply for the registry examination through the American Registry of Radiologic Technologists and the California Certification of Radiologic Technology.

Requirements for the Major

Required courses:
- ANAT 10A Introductory Human Anatomy 4.0 CSU, UC
- COMP 10 Operating the Macintosh Computer 1.5 CSU
- MED 90 Medical Terminology 3.0 CSU
- RAD 31 Fluoroscopy 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
- RAD 55A Techniques of Radiologic Technology 7.0 CSU
- RAD 55B Techniques of Radiologic Technology 2.5 CSU
- RAD 56 Techniques of Radiologic Technology 7.0 CSU
- RAD 57 Techniques of Radiologic Technology 4.0 CSU
- RAD 61A Theory of Radiologic Technology 4.0 CSU
- RAD 61B Radiographic Positioning 3.0
- RAD 61C Radiologic Technology Seminar 1.0 CSU
- RAD 62A Theory of Radiologic Technology 4.0 CSU
- RAD 62B Radiographic Positioning 3.0 CSU
- RAD 62C Radiologic Technology Seminar 1.0 CSU
- RAD 63 Theory of Radiologic Technology 4.0 CSU
- RAD 64 Theory of Radiologic Technology 4.0 CSU
- RAD 91 Nursing Procedures 2.0 CSU

Total Units 76.5

ANAT 10A, and MEDI 90 may be taken prior to RAD 50.

Entrance Requirements and Selection Procedures:

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. Applicant must be 18 years of age upon entrance into the program.

b. High school graduate or equivalent.

c. File a college application and be accepted as a student at Mt. San Antonio College.

d. After completion of 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 session.

e. Take the college placement examination which is used as an indicator.

If you have already taken a college placement exam 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.)
Programs Leading to an Associates Degree

Arrangements should be made with the Services 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.

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 Chemistry, or equivalent.

Students must complete prerequisite courses before applying to the program.

g. Forward two original 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.

h. 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 the Technology and Health Division Office, and the other to the Admissions and Records Office.

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

i. A physical examination, certain immunizations, and malpractice insurance are required of all candidates after acceptance to the program and before entrance into the clinical setting. Drug testing will be required as part of the physical examination for all radiologic technology students. Forms and information will be provided at that time.

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

k. An orientation with the Radiologic Technology Department will be held during the spring semester. Please contact the Technology and Health Division Office for date and time of orientation.

l. Make an appointment with an educational advisor to review general education requirements for graduation.

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.

Real Estate

Business Administration Department Major 20512

This program is intended to prepare 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:

- BUSM 20 Principles of Business 3.0 CSU, UC
- BUSM 60 Human Relations in Business 3.0 CSU
- BUSO 25 Business Communications 3.0 CSU
- BUSR 50 Real Estate Principles 3.0 CSU
- BUSR 51 Legal Aspects of Real Estate 3.0
- BUSR 52 Real Estate Practice, or 3.0
- BUSR 52D Real Estate Practice Work Experience 4.0
- BUSR 53 Real Estate Finance 3.0
- BUSR 54 Real Estate Appraisal 3.0
- BUSR 55 Real Estate Economics 3.0
- BUSR 66 Principles of Marketing 3.0 CSU
- CISB 15 Microcomputer Applications 4.0 CSU, UC

Total Units 34.0 – 35.0

Recommended Electives:

- BUSA 7 Principles of Accounting – Financial, or 3.0 CSU, UC
- BUSA 11 Fundamentals of Accounting, or

Real Estate Appraisal

Business Administration Department Major 20513

This program is intended to prepare 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:

- BUSA 11 Fundamentals of Accounting 3.0
- BUSC 1A Principles of Economics – Microeconomics, or 3.0 CSU, UC
- BUSC 1AH Principles of Economics – Microeconomics – Honors, or 3.0 CSU, UC
- BUSC 1B Principles of Economics – Microeconomics, or 3.0 CSU, UC
- BUSC 1BH Principles of Economics – Microeconomics – Honors, or 3.0 CSU, UC
- BUSR 50 Real Estate Principles 3.0 CSU
- BUSR 51 Legal Aspects of Real Estate 3.0
- BUSR 53 Real Estate Finance 3.0
- BUSR 54 Real Estate Appraisal 3.0
- BUSR 54SE Standards, Ethics and Statistics for Professional Practice 1.5
- BUSR 56 Advanced Real Estate Appraisal 3.0
- BUSR 66 General Appraiser Report Writing and Case Studies 3.0
- CISB 15 Microcomputer Applications 4.0 CSU, UC

Total Units 29.5

Recommended Electives:

- BUSM 66 Small Business Management
- BUSO 25 Business Communications
- BUSR 62 Mortgage Loan Brokering and Lending

Recreation

Physical Education Department

Major 22104

Students who plan to transfer to a four-year college to continue their study in the following major are encouraged to meet with a counselor or advisor and consult the catalog of the institution they plan to attend for specific requirements.

Requirements for the Major

Required courses:

- PE 1 Camp Leadership 2.0 CSU
- PE 2 The Recreation Program 2.0 CSU
- PE 3 First Aid and CPR, or 3.0 CSU, UC
- PE 5 Advanced First Aid/CPR/ Emergency Response 3.0 CSU
- PE 13 Sports Officialing 3.0 CSU, UC
- PE 17 Introduction to Physical Education 3.0 CSU, UC
- PE 19 Introduction to Care/ Prevention of Activity/ Sports-Related Injuries 3.0 CSU, UC
- PE 20 Recreation and Leisure Services 3.0 CSU
- PE 34 Fitness for Living 3.0 CSU, UC

PLUS

Select one (1) course from:

- ARTB 14 Introduction to Art Fundamentals 3.0 CSU, UC
- PSYC 1A General Psychology 3.0 CSU, UC
- SOC 1 Sociology 3.0 CSU, UC
- SOC 15 Child Development 3.0 CSU, UC

PLUS

Select four (4) 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 – 3.0 CSU, UC
- PE-I Physical Education: Individual 0.5 – 1.0 CSU, UC
- PE-L Physical Education: Adaptive 0.5 – 1.0 CSU, UC
- PE-S Physical Education: Team Sports 0.5 – 1.0 CSU, UC

Total Units 28.1 – 34.0
Registered Veterinary Technology
Agricultural Sciences Department
Major 21010

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 check the lower division requirements in the catalog of the college or university which they plan to attend and also the semester and year in which courses are offered.

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.

This degree 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 Certifying 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGAN 1</td>
<td>Animal Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGAN 2</td>
<td>Animal Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>AGAN 51</td>
<td>Animal Handling and Restraint</td>
<td>3.0</td>
</tr>
<tr>
<td>AGAN 94</td>
<td>Animal Breeding</td>
<td>3.0</td>
</tr>
<tr>
<td>AGHE 54</td>
<td>Veterinary Office Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>AGLI 95</td>
<td>Anatomy of Domestic Animals</td>
<td>4.0</td>
</tr>
<tr>
<td>AGLI 96</td>
<td>Animal Sanitation and Disease Control</td>
<td>3.0</td>
</tr>
<tr>
<td>AGLI 98</td>
<td>Physiology of Domestic Animals</td>
<td>2.0</td>
</tr>
<tr>
<td>AGHE 60</td>
<td>Medical Nursing and Animal Care</td>
<td>4.0</td>
</tr>
<tr>
<td>AGHE 61</td>
<td>Surgical Nursing</td>
<td>4.0</td>
</tr>
<tr>
<td>AGHE 62A</td>
<td>Clinical Pathology</td>
<td>4.0</td>
</tr>
<tr>
<td>AGHE 62B</td>
<td>Clinical Pathology</td>
<td>4.0</td>
</tr>
<tr>
<td>AGHE 64</td>
<td>Veterinary Pharmacology</td>
<td>3.0</td>
</tr>
<tr>
<td>AGHE 65</td>
<td>Veterinary Radiography</td>
<td>2.0</td>
</tr>
<tr>
<td>AGHE 79</td>
<td>Laboratory Animal Medicine and Care</td>
<td>3.0</td>
</tr>
<tr>
<td>AGHE 84A</td>
<td>Applied Animal Health Procedures, or</td>
<td>1.0</td>
</tr>
<tr>
<td>AGHE 84B</td>
<td>Applied Animal Health Procedures</td>
<td>1.0</td>
</tr>
<tr>
<td>AGHE 85</td>
<td>Seminar in Animal Health Technology</td>
<td>1.0</td>
</tr>
<tr>
<td>PLUS</td>
<td>Select four (4) units from:</td>
<td></td>
</tr>
<tr>
<td>AGHE 83A</td>
<td>Work Experience in Animal Health</td>
<td>1.0</td>
</tr>
<tr>
<td>AGHE 83B</td>
<td>Work Experience in Animal Health</td>
<td>2.0</td>
</tr>
<tr>
<td>PLUS</td>
<td>Select six (6) units from:</td>
<td></td>
</tr>
<tr>
<td>AGLI 12</td>
<td>Exotic Animal Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGLI 14</td>
<td>Swine Production</td>
<td>3.0</td>
</tr>
<tr>
<td>AGLI 16</td>
<td>Horse Production</td>
<td>4.0</td>
</tr>
<tr>
<td>AGLI 17</td>
<td>Sheep Production</td>
<td>3.0</td>
</tr>
<tr>
<td>AGLI 18</td>
<td>Horse Ranch Management</td>
<td>4.0</td>
</tr>
<tr>
<td>AGLI 19</td>
<td>Horse Hoof Care</td>
<td>2.0</td>
</tr>
<tr>
<td>AGLI 30</td>
<td>Beef Production</td>
<td>3.0</td>
</tr>
<tr>
<td>AGPE 70</td>
<td>Pet Shop Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGPE 71</td>
<td>Canine Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGPE 72</td>
<td>Feline Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGPE 73</td>
<td>Tropical and Coldwater Fish Management</td>
<td>2.0</td>
</tr>
<tr>
<td>AGPE 74</td>
<td>Reptile Management</td>
<td>2.0</td>
</tr>
<tr>
<td>AGPE 76</td>
<td>Aviculture – Cage and Aviary Birds</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units: 60.0

Respiratory Therapy

Respiratory Therapy 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 cardiorespiratory diseases.

Requirements for the Major

Required courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 10A</td>
<td>Introductory Human Anatomy</td>
<td>4.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>ANAT 10B</td>
<td>Introductory Human Physiology</td>
<td>4.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CHEM 10</td>
<td>Chemistry for Allied Health Majors</td>
<td>4.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>MATH 51</td>
<td>Elementary Algebra</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>MEDI 90</td>
<td>Medical Terminology</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 50</td>
<td>Theory and Principles of Respiratory Therapy</td>
<td>2.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 51A</td>
<td>Respiratory Therapy Science</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 51B</td>
<td>Respiratory Therapy Science</td>
<td>4.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 52</td>
<td>Pulmonary Anatomy and Physioloogy</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 53</td>
<td>Cardiopulmonary Pathophysiology</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 55</td>
<td>Adult Respiratory Intensive Care</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 56A-1</td>
<td>Techniques of Respiratory Therapy</td>
<td>5.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 56B-1</td>
<td>Techniques of Respiratory Therapy</td>
<td>6.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 56C-1</td>
<td>Techniques of Respiratory Therapy</td>
<td>6.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 57</td>
<td>Special Procedures for Respiratory Care</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 58</td>
<td>Neonatal Intensive Care</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 59</td>
<td>Respiratory Therapeutic Modalities</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 60</td>
<td>Comprehensive Pulmonary Assessment</td>
<td>2.0</td>
<td>CSU</td>
</tr>
<tr>
<td>RESD 61</td>
<td>Current Issues in Respiratory Care</td>
<td>3.0</td>
<td>CSU</td>
</tr>
</tbody>
</table>

Total Units: 72.0

Special Information:
The completion of the Respiratory Therapy Program and receipt of the Certificate of Completion requires completion of the Associate Degree. The student may elect to pursue either the Associate in Science or Associate in 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 required courses, the student is granted a Certificate of Completion in Respiratory Therapy. The certificate will permit the student to sit for all National Board for Respiratory Care (NBRC), Incorporations, examinations.

Entrance Requirements and Selection Procedures:

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.
3. Applicant must take the College placement exams before taking any of the prerequisite or respiratory therapy courses.

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.

5. The following courses are advisory prerequisites. It is recommended, but not required, that these courses be completed prior to starting the program. Completion of these courses is mandatory prior to graduation from the respiratory therapy program:

a. MATH 51 Elementary Algebra, or equivalent
b. CHEM 10 Chemistry for Allied Health Majors, or equivalent
c. ANAT 10A Introductory Human Anatomy, or equivalent
d. CHEM 10 Chemistry for Allied Health Majors, or equivalent
e. ANAT 10B Introductory Human Physiology, or equivalent

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 advisory 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 (including General Psychology) necessary to complete the Associate Degree before a Certificate of Completion in Respiratory Therapy will be granted. The certificate will permit the student to sit for all National Board for Respiratory Care (NBRC), Incorporated, examinations.

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 may also be required as a part of this physical examination.

Sign Language/Interpreting
Sign Language Department
Major 20801
Upon completion of this program, the graduate will be functional in sign language and will be able to interpret in a variety of situations. This program provides an overview of the Deaf community, careers working with Deaf people, teaches American Sign Language, offers specific interpreting courses, and includes training in the ethics and practical approaches that must be understood by a practicing interpreter.

Recommendations for the Major
Required courses:
SIGN 80 American Sign Language I 4.0 CSU, UC
SIGN 81 American Sign Language II 4.0 CSU, UC
SIGN 82A American Sign Language III 4.0 CSU, UC
SIGN 82B American Sign Language IV 4.0 CSU, UC
SIGN 82C American Sign Language V 4.0
SIGN 83 Deaf Perspectives 3.0
SIGN 85 American Deaf Culture 3.0 CSU, UC
SIGN 86 American Sign Language Structure 3.0 CSU, UC
SIGN 87 Translation: American Sign Language/English 3.0
SIGN 88 Principles of Sign Language Interpreting 3.0
SIGN 88A Interpreting 4.0
SIGN 88B Advanced Interpreting 4.0
SIGN 88L Practicum 1.0
SPCH 1A Public Speaking, or 3.0 CSU, UC
SPCH 1AH Public Speaking – Honors 3.0 CSU, UC

Total Units 47.0

Recommended Electives:
SIGN 89 Finger Spelling
SIGN 92 Oral Interpreting
SIGN 99 Special Projects in Sign Language/Interpreting

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
Required courses:
BUS 7 Principles of Accounting – Financial 5.0 CSU, UC
BUS 10 Principles of Continuous Quality Improvement 3.0
BUS 20 Principles of Business 3.0 CSU, UC
BUS 60 Human Relations in Business 3.0 CSU
BUS 61 Business Organization and Management 3.0 CSU
BUS 62 Human Resource Management 3.0
BUS 66 Small Business Management 3.0
BUS 36 Principles of Marketing 3.0 CSU
CIS 15 Microcomputer Applications 4.0 CSU, UC

Total Units 30.0

Recommended Electives:
BUS 81 Work Experience in Business, or
BUS 82 Work Experience in Business, or
BUS 83 Work Experience in Business, or
BUS 84 Work Experience in Business
BUS 85 Special Issues in Business, or
BUS 87 Special Issues in Marketing

Television Production
Art Department
Major 20602
This course of study qualifies the student for an Associate in 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, including camera operation, audio recordist and mixer, editor, DVD author, screenwriter, director, and general production crew-member. The program gives the student a solid basis in both the performance and the business sides of broadcasting and production. Students can further customize their program of study for on-the-air or behind-the-scenes work by selecting from a variety of optional courses.

Requirements for the Major
Required courses:
R-TV 01 Introduction to Broadcasting 3.0 CSU
R-TV 15 Broadcast Business Practices 3.0
R-TV 16 Broadcast Career Preparation 3.0
R-TV 19A Beginning Television Production 3.0 CSU
R-TV 19B Advanced Television Production 3.0 CSU
R-TV 98A Television/Film Seminar 1.0
R-TV 98B Television/Film Internship 1.0

PLUS
Select twelve (12) units from:
R-TV 05 Radio and Television Newswriting 3.0
R-TV 18 Writing for Television/Film 3.0 CSU
R-TV 20 Television News Production 3.0
R-TV 21 Remote Television Production and Engineering 3.5
R-TV 22 Electronic Graphics and Non-Linear Editing 3.0

Total Units 29.0

Recommended Electives:
ANIM 115 Storyboarding
R-TV 26 Legal Issues in Entertainment Law
THTR 17 Acting for Television

Welding
Air Conditioning, Welding & Water 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.
### Programs Leading to an Associates Degree

#### Requirements for the Major

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 40</td>
<td>Introduction to Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 50</td>
<td>Oxyacetylene Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 51</td>
<td>Basic Electric Arc Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 53A</td>
<td>Welding Metallurgy</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 70A</td>
<td>Beginning Arc Welding</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 70B</td>
<td>Intermediate Arc Welding</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 70C</td>
<td>Certification for Welders</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 80</td>
<td>Fabrication and Construction Welding</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units:** 21.0

**Recommended Electives:**

- BUSM 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

---

Section 7 61
Section 8

Programs of Study
Leading to a Certificate
PROGRAMS OF STUDY LEADING TO A CERTIFICATE

Mt. San Antonio College offers a variety of programs designed to develop or enhance vocational proficiency for which certificates are awarded upon completion. The possession of such a certificate is favorably recognized by business and industry and is frequently a requirement for professional advancement. Detailed brochures describing certificate programs are available.

Students who are in the last semester of a certificate program must:
- Submit an Application for Certificate form in the Admissions Office
- At least 1/2 of the credits earned toward the certificate must be completed at Mt. SAC
- A grade of "C" or better must be earned in each course to be applied to the certificate

Certificate programs listed do not necessarily qualify as specific majors for a two-year A.S. Degree program; however, most can be readily phased into existing majors. Students should consult the course descriptions in this Catalog to determine prerequisites for each course listed as part of a certificate program. Consult counselors for further information.

Courses of study outlined show how students may select and combine subjects in a balanced program that will prepare them for a specific vocation or further professional training. These curricula should be considered only as patterns or samples to guide students in outlining their college program since they may need to be modified to fit students' personal plans. Students who desire help in planning for a vocation or profession not listed should seek the advice of a counselor. It is apparent that Mt. San Antonio College offers students a wide range of educational experiences. They will profit from the offerings here only to the extent that they carefully plan a program of study best suited to their own pattern of interests, aptitudes, personal characteristics, and previous experiences.

<table>
<thead>
<tr>
<th>ALPHABETICAL LISTING — CERTIFICATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>Accounting ................................ 66</td>
</tr>
<tr>
<td>Accounting – Bookkeeping ............ 66</td>
</tr>
<tr>
<td>Accounting – Computerized ........... 66</td>
</tr>
<tr>
<td>Accounting – Financial Planning ..... 66</td>
</tr>
<tr>
<td>Accounting – Managerial ............. 66</td>
</tr>
<tr>
<td>Accounting – Payroll ................ 66</td>
</tr>
<tr>
<td>Administrative Assistant Level I .... 67</td>
</tr>
<tr>
<td>Administrative Assistant Level II ... 67</td>
</tr>
<tr>
<td>Administrative Assistant Level III ... 67</td>
</tr>
<tr>
<td>Air Conditioning and Refrigeration ... 67</td>
</tr>
<tr>
<td>Aircraft Powerplant Maintenance Technology – Day .... 67</td>
</tr>
<tr>
<td>Aircraft Powerplant Maintenance Technology – Evening ... 67</td>
</tr>
<tr>
<td>Airframe Maintenance Technology – Day ... 68</td>
</tr>
<tr>
<td>Airframe Maintenance Technology – Evening ... 68</td>
</tr>
<tr>
<td>Alcohol/Drug Counseling ............. 68</td>
</tr>
<tr>
<td>Animation – Digital 2-Dimensional .... 69</td>
</tr>
<tr>
<td>Animation – Digital 3-Dimensional .... 69</td>
</tr>
<tr>
<td>Animation – Traditional .............. 69</td>
</tr>
<tr>
<td>Architectural Technology Level I ..... 70</td>
</tr>
<tr>
<td>Architectural Technology Level II ... 70</td>
</tr>
<tr>
<td>Architectural Technology Level III ... 71</td>
</tr>
<tr>
<td>Art: Aesthetics for Technology ....... 71</td>
</tr>
<tr>
<td>Artistic Trainer Aide I ................ 71</td>
</tr>
<tr>
<td>B–C</td>
</tr>
<tr>
<td>Business: Human Resource Management – Level I ........... 71</td>
</tr>
<tr>
<td>Business: Human Resource Management – Level II ........ 72</td>
</tr>
<tr>
<td>Business: International – Level I ................. 72</td>
</tr>
<tr>
<td>Business: International – Level II .............. 72</td>
</tr>
<tr>
<td>Business: Management – Level I .............. 73</td>
</tr>
<tr>
<td>Business: Management – Level II .............. 73</td>
</tr>
<tr>
<td>Business: Management – Level III .......... 73</td>
</tr>
<tr>
<td>Business: Retail Management – Level I .......... 73</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Business: Retail Management – Level II .... 73</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Business: Retail Management – Level III .... 73</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Business: Small Business Management – Level I .... 74</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Business: Small Business Management – Level II .... 74</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Business: Small Business Management – Level III .... 74</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Business Workplace Competencies ......... 74</td>
</tr>
<tr>
<td>CIS – Professional Certificate: Administration ....... 74</td>
</tr>
<tr>
<td>CIS – Professional Certificate: General – Level I .......... 75</td>
</tr>
<tr>
<td>CIS – Professional Certificate: General – Level II .......... 75</td>
</tr>
<tr>
<td>CIS – Professional Certificate: General – Level III .......... 75</td>
</tr>
<tr>
<td>CIS – Professional Certificate: Small Business Management ........ 75</td>
</tr>
<tr>
<td>CIS – Professional Certificate: Teaching ................ 75</td>
</tr>
<tr>
<td>CIS – Professional Certificate in CIS – Professional Certificate in ADMINISTRATION 74</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Accounting ................ 71</td>
</tr>
<tr>
<td>CIS – Professional Certificate in CIS – Professional Certificate in Accounting – Payroll .... 66</td>
</tr>
<tr>
<td>CIS – Professional Certificate in CIS – Professional Certificate in Accounting – Payroll – Level I .... 66</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Web Programming ........ 79</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Visual Basic .......... 79</td>
</tr>
<tr>
<td>CIS – Professional Certificate in Web Programming .......... 79</td>
</tr>
<tr>
<td>Data Entry .................................. 79</td>
</tr>
<tr>
<td>Database Management Systems ......... 79</td>
</tr>
<tr>
<td>Desktop Publishing ...................... 79</td>
</tr>
<tr>
<td>Educational Paraprofessional – Level I .... 80</td>
</tr>
<tr>
<td>Educational Paraprofessional – Level II .... 80</td>
</tr>
<tr>
<td>Electronic Cabling and Wiring – Technology – Level I ........... 80</td>
</tr>
<tr>
<td>Electronic Cabling and Wiring – Technology – Level II ........... 80</td>
</tr>
<tr>
<td>Electronics and Computer-Engineering – Technology ................ 80</td>
</tr>
<tr>
<td>Electronics Communications ............ 81</td>
</tr>
<tr>
<td>Electronics Technology ................ 81</td>
</tr>
<tr>
<td>Emergency Medical Technician – Paramedic (EMT-P) .......... 81</td>
</tr>
<tr>
<td>Emergency Medical Technician I ....... 82</td>
</tr>
<tr>
<td>Engineering Design Technology – Level I ........... 82</td>
</tr>
<tr>
<td>Engineering Design Technology – Level II ........... 82</td>
</tr>
<tr>
<td>Engineering Design Technology – Level III .......... 82</td>
</tr>
<tr>
<td>Escrow Management ...................... 83</td>
</tr>
<tr>
<td>Family Child Care ....................... 83</td>
</tr>
<tr>
<td>Fashion Design – Computer-Aided ........ 83</td>
</tr>
<tr>
<td>Fashion Design – Level I ............... 83</td>
</tr>
<tr>
<td>Fashion Design – Level II ............... 83</td>
</tr>
<tr>
<td>Fashion Merchandising – Level I ........... 83</td>
</tr>
</tbody>
</table>
### Programs of Study Leading to a Certificate

#### ALPHABETICAL LISTING — CERTIFICATES (continued)

<table>
<thead>
<tr>
<th>Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fashion Merchandising — Level II</td>
<td>84</td>
</tr>
<tr>
<td>Fire Administration</td>
<td>84</td>
</tr>
<tr>
<td>Fire Management</td>
<td>84</td>
</tr>
<tr>
<td>Fire Technology</td>
<td>84</td>
</tr>
<tr>
<td>Fitness Specialist/Personal Trainer</td>
<td>84</td>
</tr>
<tr>
<td>Floral Design</td>
<td>85</td>
</tr>
<tr>
<td>Foster Care</td>
<td>85</td>
</tr>
<tr>
<td>Gallery Design/Operation and Art Profession</td>
<td>85</td>
</tr>
<tr>
<td>Geographic Information Systems</td>
<td>85</td>
</tr>
<tr>
<td>Horse Ranch Management</td>
<td>85</td>
</tr>
<tr>
<td>Hospitality: Catering</td>
<td>85</td>
</tr>
<tr>
<td>Hospitality: Food Services</td>
<td>86</td>
</tr>
<tr>
<td>Hospitality: Hospitality Management — level I</td>
<td>86</td>
</tr>
<tr>
<td>Hospitality: Hospitality Management — level II</td>
<td>86</td>
</tr>
<tr>
<td>Hospitality: Restaurant Management — level I</td>
<td>86</td>
</tr>
<tr>
<td>Hospitality: Restaurant Management — level II</td>
<td>86</td>
</tr>
<tr>
<td>I-J-K</td>
<td></td>
</tr>
<tr>
<td>Industrial Electronics</td>
<td>86</td>
</tr>
<tr>
<td>Infant/Toddler Development</td>
<td>86</td>
</tr>
<tr>
<td>Information &amp; Operating Systems Security</td>
<td>86</td>
</tr>
<tr>
<td>Interior Design — Level I — Merchandising</td>
<td>86</td>
</tr>
<tr>
<td>Interior Design — Level II — Design</td>
<td>87</td>
</tr>
<tr>
<td>Interior Design — Level III — Professional Designation</td>
<td>87</td>
</tr>
<tr>
<td>Interior Landscaping</td>
<td>87</td>
</tr>
<tr>
<td>Introduction to Computer Information Technology</td>
<td>87</td>
</tr>
<tr>
<td>Kitchen and Bath Design</td>
<td>87</td>
</tr>
<tr>
<td>L</td>
<td></td>
</tr>
<tr>
<td>Landscape and Park Maintenance</td>
<td>88</td>
</tr>
<tr>
<td>Landscape Design and Construction</td>
<td>88</td>
</tr>
<tr>
<td>Landscape Equipment Technology</td>
<td>88</td>
</tr>
<tr>
<td>Landscape Irrigation</td>
<td>88</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>88</td>
</tr>
<tr>
<td>Legal Office Specialist</td>
<td>89</td>
</tr>
<tr>
<td>Livestock Management</td>
<td>89</td>
</tr>
<tr>
<td>LVN — 30 Unit Option — Career</td>
<td>89</td>
</tr>
<tr>
<td>Mobility Track</td>
<td>89</td>
</tr>
<tr>
<td>Machine Operator</td>
<td>90</td>
</tr>
<tr>
<td>Manufacturing Technology</td>
<td>90</td>
</tr>
<tr>
<td>Marketing Management</td>
<td>90</td>
</tr>
<tr>
<td>MasterCAM</td>
<td>90</td>
</tr>
<tr>
<td>Medical Office Specialist</td>
<td>90</td>
</tr>
<tr>
<td>Mental Health Technology — Psychiatric</td>
<td>90</td>
</tr>
<tr>
<td>Microcomputer Productivity Software</td>
<td>91</td>
</tr>
<tr>
<td>Nutrition Program Assistant — Level I</td>
<td>91</td>
</tr>
<tr>
<td>Nutrition Program Assistant — Level II</td>
<td>92</td>
</tr>
<tr>
<td>Child Program Emphasis</td>
<td>92</td>
</tr>
<tr>
<td>Nutrition Program Assistant — Level II: Weight Management Program Emphasis</td>
<td>92</td>
</tr>
<tr>
<td>O-P-Q</td>
<td></td>
</tr>
<tr>
<td>Parametric Solid Modeling</td>
<td>92</td>
</tr>
<tr>
<td>Park Management</td>
<td>92</td>
</tr>
<tr>
<td>Pet Science</td>
<td>92</td>
</tr>
<tr>
<td>Photography</td>
<td>92</td>
</tr>
<tr>
<td>Programming in C++</td>
<td>92</td>
</tr>
<tr>
<td>Programming in Visual Basic</td>
<td>93</td>
</tr>
<tr>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Radio Broadcasting: Behind the Scenes</td>
<td>93</td>
</tr>
<tr>
<td>Radio Broadcasting: On the Air</td>
<td>93</td>
</tr>
<tr>
<td>Real Estate</td>
<td>93</td>
</tr>
<tr>
<td>Real Estate Appraisal</td>
<td>93</td>
</tr>
<tr>
<td>Recreation Technology</td>
<td>93</td>
</tr>
<tr>
<td>School Age Child-Specialization</td>
<td>94</td>
</tr>
<tr>
<td>Sign Language/Interpreting</td>
<td>94</td>
</tr>
<tr>
<td>Sports Turf Management</td>
<td>94</td>
</tr>
<tr>
<td>SurfCAM</td>
<td>94</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>94</td>
</tr>
<tr>
<td>Television Production</td>
<td>94</td>
</tr>
<tr>
<td>Theatrical Costumer</td>
<td>94</td>
</tr>
<tr>
<td>Tree Care and Maintenance</td>
<td>95</td>
</tr>
<tr>
<td>Water Technology</td>
<td>95</td>
</tr>
<tr>
<td>Web Page Design</td>
<td>95</td>
</tr>
<tr>
<td>Welding</td>
<td>95</td>
</tr>
<tr>
<td>Arts Division</td>
<td></td>
</tr>
<tr>
<td>Animation — Digital 2 Dimension</td>
<td>69</td>
</tr>
<tr>
<td>Animation — Digital 3 Dimension</td>
<td>69</td>
</tr>
<tr>
<td>Animation — Traditional</td>
<td>69</td>
</tr>
<tr>
<td>Art: Aesthetics for Technology</td>
<td>71</td>
</tr>
<tr>
<td>Computer Graphics Design/Photography</td>
<td>76</td>
</tr>
<tr>
<td>Gallery Design/Operation &amp; Art Profession</td>
<td>85</td>
</tr>
<tr>
<td>Radio Broadcasting: Behind the Scenes</td>
<td>93</td>
</tr>
<tr>
<td>Radio Broadcasting: On the Air</td>
<td>93</td>
</tr>
<tr>
<td>Television Production</td>
<td>94</td>
</tr>
<tr>
<td>Theatrical Costumer</td>
<td>94</td>
</tr>
<tr>
<td>Business &amp; Economic Development Division</td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>66</td>
</tr>
<tr>
<td>Accounting — Bookkeeping</td>
<td>66</td>
</tr>
<tr>
<td>Accounting — Computerized</td>
<td>66</td>
</tr>
<tr>
<td>Accounting — Financial Planning</td>
<td>66</td>
</tr>
<tr>
<td>Accounting — Managerial</td>
<td>66</td>
</tr>
<tr>
<td>Accounting — Payroll</td>
<td>66</td>
</tr>
<tr>
<td>Administrative Assistant — Level I</td>
<td>67</td>
</tr>
<tr>
<td>Administrative Assistant — Level II</td>
<td>67</td>
</tr>
<tr>
<td>Administrative Assistant — Level III</td>
<td>67</td>
</tr>
<tr>
<td>Business: Human Resource Management — Level I</td>
<td>71</td>
</tr>
<tr>
<td>Business: Human Resource Management — Level II</td>
<td>71</td>
</tr>
<tr>
<td>Business: International — Level I</td>
<td>72</td>
</tr>
<tr>
<td>Business: International — Level II</td>
<td>72</td>
</tr>
<tr>
<td>Business: International — Level III</td>
<td>72</td>
</tr>
<tr>
<td>Business: Business Management — Level I</td>
<td>73</td>
</tr>
<tr>
<td>Business: Business Management — Level II</td>
<td>73</td>
</tr>
<tr>
<td>Business: Business Management — Level III</td>
<td>73</td>
</tr>
<tr>
<td>Business: Business Retail Management — Level I</td>
<td>73</td>
</tr>
<tr>
<td>Business: Business Retail Management — Level II</td>
<td>73</td>
</tr>
<tr>
<td>Business: Business Retail Management — Level III</td>
<td>73</td>
</tr>
<tr>
<td>Children's Program Certificate: Administration</td>
<td>74</td>
</tr>
<tr>
<td>Children's Program Certificate: General — Level I</td>
<td>75</td>
</tr>
<tr>
<td>Children's Program Certificate: General — Level II</td>
<td>75</td>
</tr>
<tr>
<td>Children's Program Certificate: General — Level III</td>
<td>75</td>
</tr>
<tr>
<td>Children's Program Certificate: Small Business Management</td>
<td>75</td>
</tr>
<tr>
<td>Children's Program Certificate: Teaching</td>
<td>75</td>
</tr>
<tr>
<td>CIS — Professional Certificate in C++</td>
<td>78</td>
</tr>
<tr>
<td>CIS — Professional Certificate in Java</td>
<td>78</td>
</tr>
<tr>
<td>CIS — Professional Certificate in Networking</td>
<td>78</td>
</tr>
<tr>
<td>CIS — Professional Certificate in Object-oriented Design &amp; Programming</td>
<td>78</td>
</tr>
<tr>
<td>CIS — Professional Certificate in Oracle</td>
<td>78</td>
</tr>
<tr>
<td>CIS — Professional Certificate in SOA and Web Services</td>
<td>79</td>
</tr>
<tr>
<td>CIS — Professional Certificate in SQL</td>
<td>79</td>
</tr>
</tbody>
</table>
## Listing by Instructional Division — Certificates (continued)

### Humanities & Social Sciences Division
- Educational Paraprofessional — Level I ..... 80
- Educational Paraprofessional — Level II ..... 80
- Geographic Information Systems ..... 85
- Sign Language/Interpreting ..... 94

### Natural Sciences Division
- Floral Design ..... 85
- Horse Ranch Management ..... 85
- Interior Landscaping ..... 87
- Landscape and Park Maintenance ..... 88
- Landscape Design and Construction ..... 88
- Landscape Equipment Technology ..... 88
- Landscape Irrigation ..... 88
- Livestock Management ..... 89
- Nursery Management ..... 91
- Park Management ..... 92
- Pet Science ..... 92
- Photography ..... 92
- Sports Turf Management ..... 94
- Tree Care and Maintenance ..... 95

### Physical Education Division
- Athletic Trainer Aide I ..... 71
- Coaching ..... 76
- Fitness Specialist/Personal Trainer ..... 84
- Recreation Technology ..... 93

### Technology and Health Division
- Air Conditioning and Refrigeration ..... 67
- Aircraft Powerplant Maintenance Technology — Day ..... 67
- Aircraft Powerplant Maintenance Technology — Evening ..... 67
- Airframe Maintenance Technology — Day ..... 68
- Airframe Maintenance Technology — Evening ..... 68
- Alcohol/Drug Counseling ..... 68
- Architectural Technology — Level I ..... 70
- Architectural Technology — Level II ..... 70
- Architectural Technology — Level III ..... 71
- Computer and Networking Technology — Level I ..... 76
- Computer and Networking Technology — Level II ..... 76
- Computer Systems Technology ..... 77
- Construction Inspection ..... 77
- Correctional Sciences ..... 77
- Electronic Cabling and Wiring Technology — Level I ..... 80
- Electronic Cabling and Wiring Technology — Level II ..... 80
- Electronics and Computer — Engineering Technology ..... 80
- Electronics Communications ..... 81
- Electronics Technology ..... 81
- Emergency Medical Technician — Paramedic (EMT-P) ..... 81
- Emergency Medical Technician — Paramedic (EMT-P) ..... 81
- Engineering Design Technology — Level I ..... 82
- Engineering Design Technology — Level II ..... 82
- Engineering Design Technology — Level III ..... 82
- Fire Administration ..... 84
- Fire Management ..... 84
- Fire Technology ..... 84
- Industrial Electronics ..... 86
- Law Enforcement ..... 88
- LVN — 30 Unit Option — Career Mobility Track ..... 89
- Machine Operator ..... 90
- Manufacturing Technology ..... 90
- MasterCAM ..... 90
- Mental Health Technology — Psychiatric Technician ..... 90
- Parametric Solid Modeling ..... 92
- SurfCAM ..... 94
- Water Technology ..... 95
- Welding ..... 95
**Accounting — Bookkeeping**
Accounting and Management Department Certificate 60504

The Bookkeeping certificate provides the student with the basic skills and knowledge for entry-level positions within the clerical/accounting field. Common duties performed in this field are 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:**
- BUSA 7 Principles of Accounting — Financial, or 5.0 CSU, UC
- BUSA 8 Principles of Accounting — Managerial 5.0 CSU, UC
- BUSA 21 Cost Accounting, or 4.0
- BUSA 58 Federal Income Tax Law 3.0
- BUSA 75 Using Microcomputers in Financial Accounting, or 1.0
- BUSA 81 Work Experience in Accounting 1.0
- BUSA 76 Using Microcomputers in Managerial Accounting, or 1.0
- BUSA 81 Work Experience in Accounting 1.0
- BUSO 25 Business Communications 3.0 CSU

**Total Units 30.0 - 32.0**
Option BUSA 21 or BUSA 58: Take whichever course you have not previously taken.

**Accounting — Computerized Accounting**
Accounting and Management Department Certificate 60503

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 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:**
- BUSA 7 Principles of Accounting — Financial, or 5.0 CSU, UC
- BUSA 72 Bookkeeping — Accounting 5.0
- BUSA 53 Ten-Key Calculations, or 2.0
- BUSA 81 Work Experience in Accounting 1.0
- BUSO 5 Business English, or 3.0
- BUSO 25 Business Communications 3.0 CSU

**Plus the following courses:**
- BUSA 75 Using Microcomputers in Financial Accounting, or 1.0
- BUSA 81 Work Experience in Accounting 1.0
- BUSA 76 Using Microcomputers in Managerial Accounting, or 1.0
- CIBS 15 Microcomputer Applications 4.0 CSU, UC

**Total Units 21.0**
Administrative Assistant — Level I
Office Technology Department
Certificate 60516

The Level I Certificate prepares students for entry-level clerical positions where keyboarding is the primary function.

Requirements for the Certificate

Required courses:
- BUSO 1 Business English 3.0
- COMP 1 Computer Keyboarding, or 4.0 CSU
- COMP 1A Computer Keyboarding, and 2.0 CSU
- COMP 1B Computer Keyboarding 2.0 CSU
- COMP 12 Office Computer Applications, or 4.0 CSU, UC
- CSIS 15 Microcomputer Applications 4.0 CSU, UC
- COMP 28 Office Management Skills 3.0

Total Units 14.0

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 Support – Level I Certificate (10.5 - 11 units) as follows:
  - BUSO 5 Business English 3.0
  - COMP 1 Computer Keyboarding, or 4.0 CSU
  - COMP 1A Computer Keyboarding, 2.0 CSU
  - COMP 2 Computer Keyboarding 2.0 CSU
  - COMP 12 Office Computer Applications, or 4.0 CSU, UC
  - CSIS 15 Microcomputer Applications 4.0 CSU, UC
  - COMP 28 Office Management Skills 3.0
- Plus the following courses:
  - BUSO 25 Business Communications 3.0 CSU
  - COMP 2 Intermediate Computer Keyboarding 4.0
  - COMP 20 Word for the Business Professional, or 4.0
  - COMP 20A Microsoft Word – Level 1, and 1.0
  - COMP 20B Microsoft Word – Level 2 1.0
  - COMP 68 Transcription Techniques 3.0

Total Units 26.0 - 28.0

Administrative Assistant — Level III
Office Technology Department
Certificate 60517

The Level III Certificate prepares students for administrative assistant positions where a variety of skills are needed.

Requirements for the Certificate

Required courses:
- Completion of the Administrative Support – Level I Certificate (18.5 - 21 units) as follows:
  - BUSO 5 Business English 3.0
  - COMP 1 Computer Keyboarding, or 4.0 CSU
  - COMP 1A Computer Keyboarding, and 2.0 CSU
  - COMP 1B Computer Keyboarding 2.0 CSU
  - COMP 12 Office Computer Applications, or 4.0 CSU, UC
  - CSIS 15 Microcomputer Applications 4.0 CSU, UC
  - COMP 28 Office Management Skills 3.0
- Required courses:
  - Completion of the Administrative Support – Level II Certificate (18.5 - 21 units) as follows:
    - BUSO 25 Business Communications 3.0 CSU
    - COMP 2 Intermediate Computer Keyboarding 4.0
    - COMP 20 Word for the Business Professional, or 4.0
    - COMP 120A Microsoft Word – Level 1, and 1.0
    - COMP 120B Microsoft Word – Level 2 1.0
    - COMP 68 Transcription Techniques 3.0
- Plus the following courses:
  - Level III as follows:
    - BUSO 26 Oral Communications for Business 3.0
    - BUSO 96A Business Vocabulary 1.5
    - COMP 11 Internet Research for Business 2.0 CSU
    - COMP 13 Using Web Page Software 4.0 CSU
    - COMP 60 Desktop Publishing with InDesign or Pagemaker 4.0 CSU
    - COMP 150B Basic PowerPoint, or 1.0
    - COMP 50 Desktop Presentations using PowerPoint 4.0 CSU

Total Units 41.5 - 46.5

Air Conditioning and Refrigeration

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:
- AIRM 10 Technical Mathematics in Air Conditioning and Refrigeration 2.0
- 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 for Air Conditioning and Refrigeration 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 for Air Conditioning and Refrigeration 4.0
- AIRM 32A Air Properties and Measurements 1.5
- AIRM 32B Air Distribution Systems 1.5
- AIRM 34 Advanced Mechanical Refrigeration 4.0
- AIRM 37 Pneumatic Controls 2.0
- AIRM 39 Building Automation Systems 4.0

Total Units 37.5

Aircraft Powerplant Maintenance Technology — Day
Aircraft Maintenance Technology & Manufacturing Department
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 66A and 66B 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 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 65A Aircraft Powerplant 12.0 CSU, UC
- AIRM 65B Aircraft Powerplant Maintenance Technology 12.0
- AIRM 70A Aircraft Maintenance Electricity 3.0 and Electronics
- AIRM 70B Aircraft Maintenance Electricity 3.0 and Electronics
- 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
- 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

Aircraft Powerplant Maintenance Technology — Evening
Aircraft Maintenance Technology & Manufacturing Department
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

Day program courses AIRM 66A and 66B 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 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 65A Aircraft Powerplant 12.0 CSU, UC
- AIRM 65B Aircraft Powerplant Maintenance Technology 12.0
- AIRM 70A Aircraft Maintenance Electricity 3.0 and Electronics
- AIRM 70B Aircraft Maintenance Electricity 3.0 and Electronics
- 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
- 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

Aircraft Powerplant Maintenance Technology — Evening
Aircraft Maintenance Technology & Manufacturing Department
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
Programs of Study Leading to a Certificate

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 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 90A, 90B, 91A, 91B, 92A, 92B, 93A, and 93B.

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 3.0 Electricity and Electronics |
| - | AIRM 70B Aircraft Maintenance 3.0 Electricity and Electronics |
| - | AIRM 71 Aviation Maintenance Science 6.0 |
| - | AIRM 72 Aviation Materials and Processes 1.5 |
| - | AIRM 73 Aviation Welding 1.5 |
| - | AIRM 95A Aircraft Powerplant 3.0 Maintenance Technology |
| - | AIRM 95B Aircraft Powerplant 3.0 Maintenance Technology |
| - | AIRM 96A Aircraft Powerplant 3.0 Maintenance Technology |
| - | AIRM 96B Aircraft Powerplant 3.0 Maintenance Technology |
| - | AIRM 97A Aircraft Powerplant 3.0 Maintenance Technology |
| - | AIRM 97B Aircraft Powerplant 3.0 Maintenance Technology |
| - | AIRM 98A Aircraft Powerplant 3.0 Maintenance Technology |
| - | AIRM 98B Aircraft Powerplant 3.0 Maintenance Technology |
| Total Units 39.0 |

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 Maintenance Technology — Day
Aircraft Maintenance Technology & Manufacturing Department 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 are equivalent to evening program courses AIRM 90A, 90B, 91A, 91B, 92A, 92B, 93A, and 93B.

Successful completion of this program prepares 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 12.0 CU Technology |
| - | AIRM 66B Airframe Maintenance 12.0 Technology |
| - | AIRM 70A Aircraft Maintenance Electricity 3.0 and Electronics |
| - | 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 |
- 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 Certificate 62101

Upon completion of the required courses with a grade of “C” or better, a Certificate of Completion in Alcohol/Drug Studies will be awarded by the Technology and Health Division.
Programs of Study Leading to a Certificate

Requirements for the Certificate

Required core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD 1</td>
<td>Alcohol/Drug Dependency</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>AD 2</td>
<td>Physiological Effects of Alcohol/Drugs</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>AD 3</td>
<td>Chemical Dependency: Intervention, Treatment and Recovery</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>AD 4</td>
<td>Issues in Domestic Violence</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AD 5</td>
<td>Chemical Dependency: Prevention and Education</td>
<td>1.5</td>
<td>CSU</td>
</tr>
<tr>
<td>AD 6</td>
<td>Dual Diagnosis</td>
<td>3.0</td>
<td>CSU</td>
</tr>
</tbody>
</table>

Required skill courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD 8</td>
<td>Group Process and Leadership</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AD 9</td>
<td>Family Counseling</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>AD 10</td>
<td>Client Record and Documentation</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>AD 11</td>
<td>Techniques of Intervention and Referral</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

Required field work courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD 13</td>
<td>Internship/Seminar</td>
<td>3.5</td>
<td>CSU</td>
</tr>
<tr>
<td>AD 14</td>
<td>Advanced Internship/Seminar</td>
<td>3.5</td>
<td>CSU</td>
</tr>
</tbody>
</table>

PLUS Select two (2) courses from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CHLD 10H</td>
<td>Child Growth and Development – Honors</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>SOC 1</td>
<td>Sociology</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>PSYC 1A</td>
<td>General Psychology</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>PSYC 1B</td>
<td>Abnormal Psychology</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>SOC 14</td>
<td>Marriage and the Family</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>SOC 15</td>
<td>Child Development</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

Total Units | 40.0 |

Selection Procedure:
All classes are open to all students who meet admission requirements and course prerequisites.

Special Instructions:
Restricted electives must be taken prior to enrollment in Field Experience and can be taken in conjunction with core and skills courses.

Animation — Digital 2-Dimensional

Art Department Certificate 61011

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.

Requirements for the Certificate

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIM 101</td>
<td>Drawing – Gesture and Figure</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ANIM 104</td>
<td>Drawing Fundamentals</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ANIM 108</td>
<td>Principles of Animation</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ANIM 115</td>
<td>Storyboarding</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 116</td>
<td>Character Development</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ANIM 119</td>
<td>Portfolio, or</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ARTC 66</td>
<td>Portfolio</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 120</td>
<td>Script Development for Animation</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 172</td>
<td>Motion Graphics with After Effects</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 175</td>
<td>Web Animation with Flash</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ARTC 70</td>
<td>Computer Graphics: Introduction</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ARTD 17A</td>
<td>Drawing: Life</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
</tbody>
</table>

Total Units | 33.0 - 34.5 |

Recommended Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIM 107</td>
<td>Figure in Motion</td>
<td></td>
</tr>
<tr>
<td>ANIM 109</td>
<td>Advanced Principles of Animation</td>
<td></td>
</tr>
<tr>
<td>ANIM 130</td>
<td>Introduction to 3-D Computer Animation</td>
<td></td>
</tr>
<tr>
<td>ANIM 137A</td>
<td>Work Experience in New Digital Media</td>
<td></td>
</tr>
<tr>
<td>ANIM 137B</td>
<td>Work Experience in New Digital Media</td>
<td></td>
</tr>
<tr>
<td>ANIM 137C</td>
<td>Work Experience in New Digital Media</td>
<td></td>
</tr>
<tr>
<td>ANIM 148</td>
<td>Demo-Reel</td>
<td></td>
</tr>
<tr>
<td>ARTD 16</td>
<td>Drawing: Perspective</td>
<td></td>
</tr>
<tr>
<td>ARTD 20</td>
<td>Design: Two Dimensional</td>
<td></td>
</tr>
<tr>
<td>PHOT 10</td>
<td>Beginning Photography</td>
<td></td>
</tr>
</tbody>
</table>

Animation — Digital 3-Dimensional

Art Department 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIM 101</td>
<td>Drawing – Gesture and Figure</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ANIM 104</td>
<td>Drawing Fundamentals</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ANIM 108</td>
<td>Principles of Animation</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ANIM 115</td>
<td>Storyboarding</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 116</td>
<td>Character Development</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ANIM 130</td>
<td>Introduction to 3-D Computer Animation</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 132</td>
<td>Modeling, Texture Mapping and Lighting</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 134</td>
<td>Visual Effects I: Dynamics</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ANIM 135</td>
<td>Visual Effects II: Particle Systems</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ANIM 136</td>
<td>Animation Environment Layout</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 145</td>
<td>Advanced 3-D Modeling</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 146</td>
<td>3-D Animation</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 148</td>
<td>Demo-Reel</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ARTC 70</td>
<td>Computer Graphics: Introduction</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ARTD 17A</td>
<td>Drawing: Life</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
</tbody>
</table>

Total Units | 39.0 |

Recommended Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIM 107</td>
<td>Figure in Motion</td>
<td></td>
</tr>
<tr>
<td>ANIM 109</td>
<td>Advanced Principles of Animation</td>
<td></td>
</tr>
<tr>
<td>ANIM 119</td>
<td>Portfolio, or</td>
<td></td>
</tr>
<tr>
<td>ARTC 66</td>
<td>Portfolio</td>
<td></td>
</tr>
<tr>
<td>ANIM 120</td>
<td>Script Development for Animation</td>
<td></td>
</tr>
<tr>
<td>ANIM 137A</td>
<td>Work Experience in New Digital Media</td>
<td></td>
</tr>
<tr>
<td>ANIM 137B</td>
<td>Work Experience in New Digital Media</td>
<td></td>
</tr>
<tr>
<td>ANIM 137C</td>
<td>Work Experience in New Digital Media</td>
<td></td>
</tr>
<tr>
<td>ANIM 175</td>
<td>Web Animation with Flash</td>
<td></td>
</tr>
<tr>
<td>ARTC 70</td>
<td>Computer Graphics: Introduction</td>
<td></td>
</tr>
<tr>
<td>ARTD 16</td>
<td>Drawing: Perspective</td>
<td></td>
</tr>
<tr>
<td>ARTD 17A</td>
<td>Drawing: Life</td>
<td></td>
</tr>
<tr>
<td>ARTD 23A</td>
<td>Drawing: Head and Hands</td>
<td></td>
</tr>
</tbody>
</table>

Total Units | 39.0 - 40.5 |

Animation — Traditional

Art Department 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>CSU/UC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIM 101</td>
<td>Drawing – Gesture and Figure</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ANIM 104</td>
<td>Drawing Fundamentals</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ANIM 108</td>
<td>Principles of Animation</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ANIM 115</td>
<td>Storyboarding</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 116</td>
<td>Character Development</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ANIM 130</td>
<td>Introduction to 3-D Computer Animation</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 132</td>
<td>Modeling, Texture Mapping and Lighting</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 134</td>
<td>Visual Effects I: Dynamics</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ANIM 135</td>
<td>Visual Effects II: Particle Systems</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ANIM 136</td>
<td>Animation Environment Layout</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 145</td>
<td>Advanced 3-D Modeling</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 146</td>
<td>3-D Animation</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>ANIM 148</td>
<td>Demo-Reel</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>ARTC 70</td>
<td>Computer Graphics: Introduction</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>ARTD 17A</td>
<td>Drawing: Life</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
</tbody>
</table>

Total Units | 39.0 |

Recommended Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIM 107</td>
<td>Figure in Motion</td>
<td></td>
</tr>
<tr>
<td>ANIM 109</td>
<td>Advanced Principles of Animation</td>
<td></td>
</tr>
<tr>
<td>ANIM 119</td>
<td>Portfolio, or</td>
<td></td>
</tr>
<tr>
<td>ARTC 66</td>
<td>Portfolio</td>
<td></td>
</tr>
<tr>
<td>ANIM 120</td>
<td>Script Development for Animation</td>
<td></td>
</tr>
<tr>
<td>ANIM 137A</td>
<td>Work Experience in New Digital Media</td>
<td></td>
</tr>
<tr>
<td>ANIM 137B</td>
<td>Work Experience in New Digital Media</td>
<td></td>
</tr>
<tr>
<td>ANIM 137C</td>
<td>Work Experience in New Digital Media</td>
<td></td>
</tr>
<tr>
<td>ANIM 175</td>
<td>Web Animation with Flash</td>
<td></td>
</tr>
<tr>
<td>ARTC 70</td>
<td>Computer Graphics: Introduction</td>
<td></td>
</tr>
<tr>
<td>ARTD 16</td>
<td>Drawing: Perspective</td>
<td></td>
</tr>
<tr>
<td>ARTD 17A</td>
<td>Drawing: Life</td>
<td></td>
</tr>
<tr>
<td>ARTD 23A</td>
<td>Drawing: Head and Hands</td>
<td></td>
</tr>
</tbody>
</table>

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, or
ANIM 137B Work Experience in New Digital Media, or
ANIM 137C Work Experience in New Digital Media
ARTD 17B Drawing: Life
ARTD 20 Design: Two Dimensional
ARTS 22 Design: Three Dimensional
ARTS 41A Sculpture: Life
PHOT 8 Digital Photography

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

This multi-level certificate program is intended to prepare 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. The student will be required to develop both design and working drawing portfolios. Current technology and computer (CADD) skills are integrated into the program. An A.S. Degree program is also available.

Requirements for the Certificate

Required courses:
ARCH 10 Design I – Elements of Design 3.0 CSU, UC
ARCH 11 Architectural Drawing 3.0 CSU, UC
ARCH 12 Architectural Materials and Specifications 3.0 CSU
ARCH 13 Architectural Illustration 3.0 CSU, UC
ARCH 14 Building and Zoning Codes 3.0
ARCH 15 Architectural Working Drawings – I 3.0 CSU
ARCH 16 Basic CAD and Computer Application 4.0
ARCH 18 Architectural Computer Aided Design Elements 3.0

PLUS
Select six (6) units from:
ARTA 5 History of Western Art: Renaissance Through Modern, or
ARTA 5H History of Western Art: Renaissance Through Modern – Honors
BUSC 1A Principles of Economics – Macroeconomics, or
BUSC 1AH Principles of Economics – Macroeconomics – Honors
ENGL 1A Freshman Composition, or
ENGL 1AH Freshman Composition – Honors
ENGL 1B English – Introduction to Literary Types, or
ENGL 1BH English – Introduction to Literary Types – Honors
ENGL 1C Critical Thinking and Writing, or
ENGL 1CH Critical Thinking and Writing – Honors
PHIL 12 Ethics, or
PHIL 12H Ethics – Honors
PHIL 15 Contemporary Health Issues 3.0 CSU, UC
PHIL 16 Humans and the Environment 3.0 CSU, UC
Total Units 31.0

Architectural Technology — Level II
Architecture and Engineering Design
Department Certificate 60203

This multi-level Certificate program is intended to prepare 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. The student will be required to develop both design and working drawing portfolios. Current technology and computer (CADD) skills are integrated into the program. An A.S. Degree program is also available.

Requirements for the Certificate

Required courses:
Completion of the Architectural Technology – Level I Certificate (31 units) as follows:
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 13 Architectural Illustration 3.0 CSU, UC
ARCH 14 Building and Zoning Codes 3.0
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

PLUS
Select three (3) units from:
ARTA 5 History of Western Art: Renaissance Through Modern, or
ARTA 5H History of Western Art: Renaissance Through Modern – Honors
BUSC 1A Principles of Economics – Macroeconomics, or
BUSC 1AH Principles of Economics – Macroeconomics – Honors
ENGL 1A Freshman Composition, or
ENGL 1AH Freshman Composition – Honors
ENGL 1B English – Introduction to Literary Types, or
ENGL 1BH English – Introduction to Literary Types – Honors
ENGL 1C Critical Thinking and Writing, or
ENGL 1CH Critical Thinking and Writing – Honors
PHIL 12 Ethics, or
PHIL 12H Ethics – Honors
PHIL 15 Contemporary Health Issues 3.0 CSU, UC
PHIL 16 Humans and the Environment 3.0 CSU, UC

PLUS
Additional required courses:
Level II as follows:
ARCH 21 Design II – Architectural Design 3.0 CSU
ARCH 23 Architectural Presentations 3.0 CSU
ARCH 26 Architectural CAD Working Drawings 3.0

EDT 20 Technical Descriptive Geometry 3.0 CSU

PLUS

PHYS 2AG General Physics 4.0 CSU, UC
PSYC 1A Introduction to Psychology, or
PSYC 1AH Introduction to Psychology – Honors
SOC 1H Sociology – Honors 3.0 CSU, UC
SPCH 1A Public Speaking, or
SPCH 1AH Public Speaking – Honors 3.0 CSU, UC

70 2006-07 Mt. San Antonio College Catalog
### Programs of Study Leading to a Certificate

#### Architectural Technology — Level III

**Architectural and Engineering Design Department Certificate 60204**

This multi-level certificate program is intended to prepare 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 areas. The student is provided with an option of direct preparation for transfer program should consult with an advisor to discuss transferability of courses.

#### Requirements for the Certificate

**Completion of the Architectural Technology: Level I and Level II Certificates (46 units).**

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 11</td>
<td>Architectural Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 62</td>
<td>Human Resource Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 20</td>
<td>Principles of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 61</td>
<td>Business Organization and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 62</td>
<td>Human Resource Management and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 1A</td>
<td>Freshman Composition, or</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 1AH</td>
<td>Freshman Composition – Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 1H</td>
<td>English – Introduction to Literary Types, or</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 18H</td>
<td>English – Introduction to Literary Types – Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 20</td>
<td>Principles of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 61</td>
<td>Business Organization and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 62</td>
<td>Human Resource Management and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 3</td>
<td>History of World Civilization</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 51</td>
<td>Elementary Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 51</td>
<td>Elementary Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 71</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Trigonometry</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 51</td>
<td>Elementary Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 51</td>
<td>Elementary Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 71</td>
<td>Intermediate Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Trigonometry</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 19</td>
<td>Introduction to Care/ Prevention of Activity/</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 3</td>
<td>First Aid and CPR, or</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 5</td>
<td>Advanced First Aid/CPR/ Emergency Response</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 19</td>
<td>Introduction to Care/ Prevention of Activity/</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 5</td>
<td>Introduction to Philosophy, or</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 5H</td>
<td>Introduction to Philosophy – Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYS 2AG</td>
<td>General Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>PHYS 2AG</td>
<td>General Physics</td>
<td>4.0</td>
</tr>
<tr>
<td>PSYC 1A</td>
<td>Introduction to Psychology, or</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 1AH</td>
<td>Introduction to Psychology – Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 33</td>
<td>Psychology for Effective Living</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 1</td>
<td>Sociology, or</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 1H</td>
<td>Sociology – Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 1A</td>
<td>Public Speaking, or</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 1AH</td>
<td>Public Speaking – Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>46.0</td>
</tr>
</tbody>
</table>

#### Art: Aesthetics for Technology

**Art Department Certificate 61013**

The certificate program is designed for the student thinking about joining the professional work force or seeking current job advancement. It provides design skills necessary in art and technology related industries. A variety of career opportunities are available in Art, Advertising, Graphic Design, Animation, Journalism, and Multimedia. Working professionals or students who hold current certificates offered by the Office Technology Department, Photographics, Architecture and Design Department, the Family and Consumer Sciences Department, and wish to augment their design skills, would find this certificate beneficial.

#### Requirements for the Certificate

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTE 1H</td>
<td>Graphic Design: Lettering and Typography</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTE 1H</td>
<td>Graphic Design: Lettering and Typography</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTE 1H</td>
<td>Graphic Design: Web Page Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTE 16</td>
<td>Design: Layout</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTE 165</td>
<td>Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 25A</td>
<td>Painting: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 25A</td>
<td>Painting: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 25A</td>
<td>Painting: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 25A</td>
<td>Painting: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>总 Units</td>
<td></td>
<td>12.0</td>
</tr>
</tbody>
</table>

**Recommended Electives:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTD 25A</td>
<td>Painting: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 25A</td>
<td>Painting: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 25A</td>
<td>Painting: Beginning</td>
<td>3.0</td>
</tr>
<tr>
<td>ARTD 25A</td>
<td>Painting: Beginning</td>
<td>3.0</td>
</tr>
</tbody>
</table>

#### Business: Human Resource Management — Level I

**Accounting and Management Department Certificate 60531**

This introductory certificate exposes students to the business world and the role of human resources. Students become familiar with various approaches to business organization and the strategic nature of human resources. This certificate may aid the student's search for an entry-level job in the business world.

#### Requirements for the Certificate

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSM 20</td>
<td>Principles of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 61</td>
<td>Business Organization and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 62</td>
<td>Human Resource Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 20</td>
<td>Principles of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 61</td>
<td>Business Organization and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 62</td>
<td>Human Resource Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>9.0</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.
Programs of Study Leading to a Certificate

Accounting and Management Department Certificate 60534
This certificate builds upon the Level I Certificate to provide students with specific knowledge of human resource management functions, HR law, compensations systems, and an understanding of human motivation. This program 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:
Level I 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

Plus the following courses:
Level II as follows:
- ANTH 22 General Cultural Anthropology 3.0 CSU, UC
- BUSM 60 Human Relations in Business 3.0 CSU
- BUSO 25 Business Communications, or 3.0 CSU
- BUSO 25A Business Communications A, and 1.5 CSU
- BUSO 25B Business Communications B 1.5 CSU

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: International — Level II
Accounting and Management Department Certificate 60537
This program will afford students career opportunities for entry-level employment in international sales and marketing. Students will gain a practical, hands-on perspective of how to compete in a global system of conflicting laws, regulations, and requirements.

Requirements for the Certificate
Completion of the Business: International — Level I Certificate (9 Units) as follows:

Required courses:
Level I as follows:
- BUSM 20 Principles of Business 3.0 CSU, UC
- BUSM 50 World Culture: A Business Perspective, or 3.0 CSU
- BUSM 51 Principles of International Business 3.0
- BUSL 20 International Business Law 3.0
- BUSM 52 Principles of Exporting and Importing 3.0

Plus Select one (1) course from:
- BUSS 70 International Marketing Concepts 3.0
- CHIN 1 Beginning Chinese 4.0 CSU, UC
- FRCH 1 Elementary French 4.0 CSU, UC
- GERM 1 Elementary German 4.0 CSU, UC
- ITAL 1 Elementary Italian 4.0 CSU, UC
- JAPN 1 Elementary Japanese 4.0 CSU, UC
- SPAN 1 Elementary Spanish 4.0 CSU, UC

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 60538
Upon completion of the Business: International Level II 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.

Requirements for the Certificate
Completion of the Business: International — Level I and II Certificates (18 Units) as follows:

Required courses:
Level I as follows:
- BUSM 20 Principles of Business 3.0 CSU, UC
- BUSM 51 Principles of International Business 3.0
- BUSM 52 Principles of Exporting and Importing 3.0

Level II as follows:
- BUSM 61 Business Organization and Management 3.0 CSU
- BUSM 66 Small Business Management 3.0

PLUS
Select one (1) course from:
- BUSS 70 International Marketing Concepts 3.0
- CHIN 1 Beginning Chinese 4.0 CSU, UC
- FRCH 1 Elementary French 4.0 CSU, UC
- GERM 1 Elementary German 4.0 CSU, UC
- ITAL 1 Elementary Italian 4.0 CSU, UC
- JAPN 1 Elementary Japanese 4.0 CSU, UC
- SPAN 1 Elementary Spanish 4.0 CSU, UC

Total Units 27.0 - 28.0
**Requirements for the Certificate**

**Required courses:**
- BUSM 20 Principles of Business 3.0 CSU, UC
- BUSM 61 Business Organization 3.0 CSU and Management
- BUSS 36 Principles of Marketing 3.0 CSU

**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.

**Busines: 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 management career.

**Requirements for the Certificate**

Completion of the Business: Management — Level I and Level II Certificates (18.5 Units) as follows:

**Required courses:**
- BUSM 20 Principles of Business 3.0 CSU, UC
- BUSM 61 Business Organization 3.0 CSU and Management
- BUSS 36 Principles of Marketing 3.0 CSU

**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 I**

Accounting and Management Department Certificate 60500

This introductory certificate 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. This certificate may aid the student's search for an entry-level job in retail management.

**Requirements for the Certificate**

Completion of Business: Management Level I Certificate

**Required courses:**
- BUSO 25 Business Communications 3.0 CSU
- CISB 15 Microcomputer Applications 4.0 CSU
- FASH 62 Retail Store Management and Merchandising 3.0 CSU
- BUSS 36 Principles of Marketing 3.0 CSU

**Total Units 10.0**

**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

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**

Completion of the Retail Management — Level I Certificate (9.5 Units) as follows:

**Required courses:**
- BUSO 25 Business Communications 3.0 CSU
- BUSS 36 Principles of Marketing 3.0 CSU
- FASH 62 Retail Store Management and Merchandising 3.0 CSU
- CISB 15 Microcomputer Applications 4.0 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: Retail Management — Level II**

Accounting and Management Department Certificate 60501

This intermediate certificate builds upon the Level I Certificate to expose students to the various functions of managers in retail positions. Fundamentals of business organization, retail marketing and staffing provides the student a solid foundation from which to build a career in retail management.

**Requirements for the Certificate**

Completion of the Retail Management — Level I Certificate (9.5 Units) as follows:

**Required courses:**
- BUSO 25 Business Communications 3.0 CSU
- BUSS 36 Principles of Marketing 3.0 CSU
- FASH 62 Retail Store Management and Merchandising 3.0 CSU
- CISB 15 Microcomputer Applications 4.0 CSU

**Total Units 13.0**

**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

#### Required courses:
Completion of the Retail Management – Level II certificate (21.5 Units) as follows:
- BUSA 11 Fundamentals of Accounting 3.0
- BUSM 61 Business Organization 3.0 CSU
- BUSM 62 Human Resource Management 3.0
- BUSS 36 Principles of Marketing 3.0 CSU

#### Plus the following courses:
- BUSA 7 Principles of Accounting – Financial 5.0 CSU, UC
- BUSM 60 Human Relations in Business 3.0 CSU
- BUSO 26 Oral Communications for Business 3.0

#### Total Units 33.0

### 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 I
**Accounting and Management Department Certificate 60529**
Small Business has been described as the engine of change within the economy. The Business: Small Business Management — Level I Certificate exposes students to the fundamentals of managing and planning a small business. Upon completion students may qualify for an entry-level management position in a small business. Entrepreneurs may use this certificate as a means to plan and develop new business ventures.

#### Requirements for the Certificate
**Required courses:**
- BUSM 20 Principles of Business 3.0 CSU, UC
- BUSM 66 Small Business Management 3.0
- BUSS 36 Principles of Marketing 3.0 CSU

#### 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.

#### 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:**
- BUSM 61 Business Organization 3.0 CSU
- BUSM 66 Small Business Management 3.0
- BUSS 36 Principles of Marketing 3.0 CSU

#### Plus the following courses:
- BUSA 11 Fundamentals of Accounting 3.0 CSU, UC
- BUSM 60 Human Relations in Business 3.0 CSU
- BUSM 61 Business Organization 3.0 CSU
- BUSM 62 Human Resource Management 3.0

#### 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
**Required courses:**
- BUSM 20 Principles of Business 3.0 CSU, UC
- BUSM 66 Small Business Management 3.0
- BUSS 36 Principles of Marketing 3.0 CSU

#### Plus the following courses:
- BUSA 11 Fundamentals of Accounting 3.0 CSU, UC
- BUSM 60 Human Relations in Business 3.0 CSU
- BUSM 61 Business Organization 3.0 CSU
- BUSM 62 Human Resource Management 3.0

#### 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: 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:**
- BUSA 7 Principles of Accounting – Financial 5.0 CSU, UC
- BUSM 10 Principles of Continuous Quality Improvement 3.0
- CISB 15 Microcomputer Applications 4.0 CSU, UC

#### Total Units 30.0

### Children's Program Certificate: Administration
**Family and Consumer Sciences Department 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:**
- 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, or 3.0 CSU, UC
- CHLD 10H Child Growth and Development – Honors 3.0 CSU, UC
- CHLD 64 Health, Safety and Nutrition of Young Children 3.0
- CHLD 68 Children with Special Needs 3.0 CSU
- CHLD 84 Guidance and Discipline in Child Development Settings 1.0

#### PLUS Select three (3) courses from:
- CHLD 61 Language Arts & Art Media for Young Children 3.0
- CHLD 62 Music and Motor Development for Young Children 3.0 CSU
- CHLD 63 Creative Science and Math for Young Children 3.0
- CHLD 73 Infant/Toddler Care and Development 3.0 CSU

#### Additional required courses:
- CHLD 50 Multicultural Education: Anti-Bias Perspective 3.0
- CHLD 71A Administration of Child Development Programs 3.0 CSU
Children's Program Certificate: General — Level I
Family and Consumer Sciences Department 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**

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

**Total Units**: 12.0

**Chld's Program Certificate: General — Level II**

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

**Plus the following courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 64</td>
<td>Health, Safety and Nutrition of Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 68</td>
<td>Children with Special Needs</td>
<td>3.0 CSU</td>
</tr>
<tr>
<td>CHLD 84</td>
<td>Guidance &amp; Discipline in Early Childhood Settings</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Total Units**: 19.0

**Children’s Program Certificate: General — Level III**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSM 5</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 66</td>
<td>Small Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 18</td>
<td>Business Law, or</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 75</td>
<td>Principles of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSM 61</td>
<td>Business Organization and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSO 25</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSS 33</td>
<td>Advertising and Promotion</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSS 36</td>
<td>Principles of Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>CISB 11</td>
<td>Computer Information Systems</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units**: 43.0

**Recommended Electives:**

- BUSA 70 Payroll and Tax Accounting, or
- BUSA 71 Financial Planning
- BUSL 18 Business Law, or
- BUSL 18H Business Law — Honors
- BUSM 20 Principles of Business
- BUSM 61 Business Organization and Management
- BUSO 25 Business Communications
- BUSS 33 Advertising and Promotion
- BUSS 36 Principles of Marketing
- CISB 11 Computer Information Systems

Children's Program Certificate: Teaching
Family and Consumer Sciences Department 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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 1</td>
<td>Child, Family and Community</td>
<td>3.0 CSU, UC</td>
</tr>
<tr>
<td>CHLD 5</td>
<td>Principles/Practices in Child Development Programs</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 6</td>
<td>Survey of Child Development Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development, or</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>CHLD 64</td>
<td>Health, Safety and Nutrition of Young Children</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 84</td>
<td>Guidance and Discipline in Early Childhood Settings</td>
<td>1.0</td>
</tr>
<tr>
<td>CHLD 10H</td>
<td>Child Growth and Development — Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units**: 33.0

Programs of Study Leading to a Certificate

**Recommended Electives:**

- BUSA 70 Payroll and Tax Accounting, or
- BUSA 71 Financial Planning
- BUSL 18 Business Law, or
- BUSL 18H Business Law — Honors
- BUSM 20 Principles of Business
- BUSM 61 Business Organization and Management
- BUSO 25 Business Communications
- BUSS 33 Advertising and Promotion
- BUSS 36 Principles of Marketing
- CISB 11 Computer Information Systems
Programs of Study Leading to a Certificate

**Plus the following courses:**

- CHLD 50 Multicultural Education: Anti-Bias Perspective 3.0
- CHLD 66 Early Childhood Development Observation 2.0 CSU
- CHLD 66L Early Childhood Development Observation Laboratory 1.0 CSU
- CHLD 67 Early Childhood Development Participation 2.0 CSU
- CHLD 67L Early Childhood Development Participation Laboratory 1.0 CSU
- CHLD 69 Early Childhood Field Work Seminar 2.0
- CHLD 75 Supervising Adults in Early Childhood Settings 2.0
- CHLD 91 Early Childhood Development Field Work 1.0

**PLUS Select two (2) courses from:**

- CHLD 50 Multicultural Education: Anti-Bias Perspective 3.0
- CHLD 62 Music and Motor Development 3.0 CSU
- CHLD 61 Language Arts & Art Media 3.0
- CHLD 91 Early Childhood Development Field Work 1.0
- CHLD 66 Early Childhood Development 2.0
- CHLD 69 Early Childhood Field Work Seminar 2.0
- CHLD 75 Supervising Adults in Early Childhood Settings 2.0
- CHLD 91 Early Childhood Development Field Work 1.0

**Total Units 39.0**

### Computer and Networking Technology — Level I

#### Electronics and Computer Technology Department

**Certificate 60725**

The Computer and Networking Technology Major and Certificates are intended to prepare 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, and Network security. Skills are developed so that students can provide customer service in the installation, software configuration, maintenance, operation, troubleshooting and repair of computers and their associated networking software/hardware. In addition to acquiring specialized skills in computer and networks servicing, the student will be prepared to take the A+, Network+, Server+, and Security+ certification tests offered at testing centers throughout the country. These certifications are CompTIA sponsored and are recognized worldwide as industry benchmarks for computer and networking technicians. Further, the student will have the requisite skills upon which to build in order to seek additional certification.

**Requirements for the Certificate Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNET 50</td>
<td>PC Servicing</td>
</tr>
<tr>
<td>CNET 52</td>
<td>PC Operating Systems</td>
</tr>
<tr>
<td>CNET 54</td>
<td>PC Troubleshooting</td>
</tr>
<tr>
<td>CNET 60</td>
<td>A+ Certification Preparation</td>
</tr>
<tr>
<td>ELEC 11</td>
<td>Technical Applications in Microcomputers, or</td>
</tr>
<tr>
<td>CISB 15</td>
<td>Microcomputer Applications</td>
</tr>
<tr>
<td>ELEC 50A</td>
<td>Electronics Theory</td>
</tr>
<tr>
<td>ELEC 50AL</td>
<td>Electronics Laboratory</td>
</tr>
<tr>
<td>ELEC 50B</td>
<td>Electronics Theory</td>
</tr>
<tr>
<td>ELEC 50BL</td>
<td>Electronics Laboratory</td>
</tr>
<tr>
<td>ELEC 56</td>
<td>Digital Electronics</td>
</tr>
<tr>
<td>ELEC 56L</td>
<td>Digital Electronics Laboratory</td>
</tr>
</tbody>
</table>

**Plus the following courses:**

- CNET 56 | Computer Networks | 4.0 |
- CNET 62 | Network+ Certification Preparation | 3.0 |
- CNET 64 | Server+ Certification Preparation | 3.0 |
- CNET 66 | Security+ Certification Preparation | 3.0 |
- ELEC 60 | Customer Relations for the Technician | 1.0 |

**Total Units 28.0 - 29.0**

### Computer Graphic Design/Photography

**Photographics Department**

**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:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRAP 1</td>
<td>Computer Graphics Lab</td>
</tr>
<tr>
<td>GRAP 10</td>
<td>Photo Editing with Photoshop</td>
</tr>
<tr>
<td>GRAP 12</td>
<td>Advanced Photo Editing with Photoshop</td>
</tr>
<tr>
<td>GRAP 14</td>
<td>Digital Color Management</td>
</tr>
<tr>
<td>GRAP 16</td>
<td>Digital Image Design with Illustrator &amp; Firehand</td>
</tr>
<tr>
<td>GRAP 20</td>
<td>Applying Photos and Images in Multimedia</td>
</tr>
<tr>
<td>GRAP 28</td>
<td>Digital Portfolio</td>
</tr>
<tr>
<td>PHOT 10</td>
<td>Beginning Photography</td>
</tr>
<tr>
<td>PHOT 17</td>
<td>Photocommunication</td>
</tr>
</tbody>
</table>

**Total Units 24.0**

**Recommended Electives:**

- AHIS 1 | Understanding the Visual Arts, or |
- ARTB 1 | Understanding the Visual Arts |
- COMP 10 | Operating the Macintosh Computer |
- GRAP 18 | Advanced Image Design – 3D Modeling Techniques |
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.

Requirements for the Certificate
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
- MAT 51 Elementary Algebra 4.0

Total Units 22.0

Recommended Electives:
- ARCH 11 Architectural Drawing
- ARCH 15 Architectural Working Drawings – I
- EIT 26 Civil Engineering Technology and CAD
- INS 67 Reading Construction Drawings

Total Units 29.0

Consumer Services
Family and Consumer Sciences Department 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.

Certificate requirements state that at least half of the 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, available at the Admissions and Records Office, in order to be awarded the Certificate.

Requirements for the Certificate
Required courses:
- BUS 18 Business Law 3.0 CSU
- BUS 18H Business Law – Honors 3.0 CSU
- BUSM 60 Human Relations in Business 3.0 CSU
- ECS 41 Life Management 3.0 CSU
- ECS 80 Financial Planning 3.0 CSU
- BUSA 71 Financial Planning 3.0 CSU
- ECS 91 Work Experience in Family and Consumer Sciences 1.0
- BUS 36 Paralegal Internship 1.0

PLUS
Select two (2) courses from:
- BUS 5 Business English 3.0
- BUS 25 Business Communications 3.0 CSU
- COMP 12 Office Computer Applications 4.0 CSU, UC
- CISP 15 Microcomputer Applications 4.0 CSU, UC

Total Units 19.0 - 20.0

Correctional Sciences
Public Services Department Certificate 62103

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 Certificate
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 Prohibition and Parole 3.0
- CORS 30 Ethnic Relations in Corrections 3.0

PLUS
Select four (4) courses from:
- ADJU 1 The Administration of Justice System 3.0 CSU, UC
- ADJU 2 Principles and Procedures of the Justice System 3.0 CSU
- ADJU 20 Principles of Investigation 3.0 CSU
- ADJU 38 Narcotics Investigation 3.0
- ADJU 59 Street Gangs and Law Enforcement 3.0
- CORS 35 Interviewing and Counseling 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 3.0
- PE-F 51 Agility Testing Preparation for Law Enforcement and Fire Science 3.0
- PE-F 52 Fitness and Conditioning for Law Enforcement, Fire Science and Forestry 3.0
- SPAN 66 Spanish for Fire and Police Personnel

Culinary Arts — Level I
Family and Consumer Sciences Department 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
Required courses:
- HRM 52 Food Safety and Sanitation 1.5 CSU
- HRM 54 Basic Cooking Techniques 3.0 CSU
- HRM 91 Work Experience in Restaurant/ Hospitality 1.0 CSU
- NF 20 Principles of Foods with Lab 3.0 CSU

PLUS
Select six (6) units from:
- HRM 61 Menu Planning 3.0 CSU
- HRM 62 Catering 3.0 CSU
- NF 61 Creative Foods 3.0
- NF 62 Meal Management 3.0 CSU

Total Units 14.5
CIS Professional Certificate 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:
- CISP 21 Programming in C# 4.0
- CISP 41 Programming in C# 4.0
Total Units 12.0

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:
- CISD 21 SQL Server 4.0
- CISP 41 Programming in C++ 4.0
- CISP 44 Advanced Programming in C++ 4.0
Total Units 12.0

CIS Professional Certificate in Database Management — 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 prepares the student to work and manage data using a PC-based Database Management System. The program covers the major topics of the Microsoft MOUS certification exam for Access.

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 11 Database Management — Microcomputers 4.0 CSU
- CISD 14 Advanced Database Management — Microcomputers 4.0
- CISD 40 Database Design 2.0
Total Units 10.0

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:
- CISS 21 Network Vulnerabilities and Countermeasures 4.0 CSU
- CISS 23 Network Analysis and NIDS 4.0 CSU
- CISS 25 Network Security and Firewalls 4.0 CSU
Total Units 12.0

CIS Professional Certificate In Object-Oriented Design & Programming
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, or 4.0 CSU, UC
- CISP 21 Programming in C++, or 4.0 CSU, UC
- CISP 24 Advanced Java, or 4.0 CSU, UC
- CISP 21 Programming in Java, or 4.0 CSU, UC
- CISP 41 Programming in C# 4.0
- CISP 14 Advanced Basic Programming, or 4.0 CSU, UC
- CISP 34 Advanced C++, Programming, or 4.0 CSU, UC
- CISP 24 Advanced Java Programming, or 4.0
- CISP 44 Advanced Programming in C# 4.0
- CISP 51 Principles of Object-Oriented Design 2.0
Total Units 10.0

CIS Professional Certificate In Oracle
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:
- CISP 21 Network Vulnerabilities and Countermeasures 4.0 CSU
- CISS 23 Network Analysis and NIDS 4.0 CSU
- CISS 25 Network Security and Firewalls 4.0 CSU
Total Units 12.0
## Programs of Study Leading to a Certificate

### CIS Professional Certificate in SOA and Web Services
**Computer Information Systems Department Certificate 60724**

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 help the student understand the concepts and theories underlying service oriented architecture (SOA), XML technologies (DTD, XSD, XLST, XQuery and XPath), and Web services technologies (UDDI, WSQD and SOAP).

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISW 41</td>
<td>XML Secure Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CISW 49</td>
<td>Service Oriented Architecture Concepts &amp; Practice</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td><strong>6.0</strong></td>
</tr>
</tbody>
</table>

### 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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSD 21</td>
<td>SQL Server</td>
<td>4.0</td>
</tr>
<tr>
<td>CSD 31</td>
<td>Database Management</td>
<td>4.0</td>
</tr>
<tr>
<td>CSD 40</td>
<td>Database Design</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td><strong>10.0</strong></td>
</tr>
</tbody>
</table>

### CIS Professional Certificate In Telecommunications
**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 develop a fundamental understanding of local area networks, wide area networks, and telecommunications.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISN 11</td>
<td>Telecommunications/ Networking Fundamentals</td>
<td>4.0 CSU</td>
</tr>
<tr>
<td>CISN 14</td>
<td>Advanced Telecommunications</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td><strong>8.0</strong></td>
</tr>
</tbody>
</table>

### 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 prepare the student to develop applications using Visual Basic for Windows or Web based systems.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 11</td>
<td>Basic Programming</td>
<td>4.0 CSU, UC</td>
</tr>
<tr>
<td>CISP 14</td>
<td>Advanced Basic Programming</td>
<td>4.0 CSU, UC</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td><strong>8.0</strong></td>
</tr>
</tbody>
</table>

### CIS Professional Certificate in Web 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 programming skills needed to create effective web pages and web sites using various scripting or markup languages like JavaScript, VBScript, HTML, DHTML, and XML. Includes practical knowledge of how to install, manage, and troubleshoot web servers and access information from a database server. Helps students in obtaining programming jobs with companies with a web presence.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 2</td>
<td>Intermediate Computer Keyboarding</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 12</td>
<td>Office Computer Applications, or</td>
<td>4.0 CSU, UC</td>
</tr>
<tr>
<td>CISP 15</td>
<td>Microcomputer Applications</td>
<td>4.0 CSU, UC</td>
</tr>
<tr>
<td>COMP 18</td>
<td>Data Entry</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td><strong>11.0</strong></td>
</tr>
</tbody>
</table>

### Data Entry
**Office Technology Department Certificate 60701**

This program 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. Students desiring a Bachelor’s Degree (transfer program) should consult with a counselor or advisor to discuss transferability of courses.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 1A</td>
<td>Computer Keyboarding, or</td>
<td>2.0 CSU</td>
</tr>
<tr>
<td>COMP 1</td>
<td>Computer Keyboarding</td>
<td>4.0 CSU</td>
</tr>
<tr>
<td>COMP 11</td>
<td>Internet Research for Business</td>
<td>2.0 CSU</td>
</tr>
<tr>
<td>COMP 60</td>
<td>Desktop Publishing with InDesign or Pagemaker, or</td>
<td>4.0 CSU</td>
</tr>
<tr>
<td>COMP 62</td>
<td>Desktop Publishing with QuarkXpress</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 63</td>
<td>Adobe Illustrator for Desktop Publishers, or</td>
<td>4.0</td>
</tr>
<tr>
<td>GRAP 16</td>
<td>Digital Image Design with Illustrator &amp; Freehand</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP 64</td>
<td>Desktop Publishing Seminar</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td><strong>37.0</strong></td>
</tr>
</tbody>
</table>

### Desktop Publishing
**Office Technology Department Certificate 60711**

This program will afford career opportunities in businesses desiring desktop publishing skills or in starting your own business.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 1A</td>
<td>Computer Keyboarding, or</td>
<td>2.0 CSU</td>
</tr>
<tr>
<td>COMP 1</td>
<td>Computer Keyboarding</td>
<td>4.0 CSU</td>
</tr>
<tr>
<td>COMP 11</td>
<td>Internet Research for Business</td>
<td>2.0 CSU</td>
</tr>
<tr>
<td>COMP 60</td>
<td>Desktop Publishing with InDesign or Pagemaker, or</td>
<td>4.0 CSU</td>
</tr>
<tr>
<td>COMP 62</td>
<td>Desktop Publishing with QuarkXpress</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 63</td>
<td>Adobe Illustrator for Desktop Publishers, or</td>
<td>4.0</td>
</tr>
<tr>
<td>GRAP 16</td>
<td>Digital Image Design with Illustrator &amp; Freehand</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP 64</td>
<td>Desktop Publishing Seminar</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td><strong>37.0</strong></td>
</tr>
</tbody>
</table>
Programs of Study Leading to a Certificate

Educational Paraprofessional — Level I
Psychology and Education Department
Certificate 62107

This certificate program in the field of Education prepares paraprofessionals in a variety of areas, emphasizing working with children to enhance their learning and development. Students will be able to assist classroom teachers in working with children of all ages and backgrounds. These classes assist students to prepare to pass the CBEST, as well.

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

Total Units 13.0

Educational Paraprofessional — Level II
Psychology and Education Department
Certificate 62108

This certificate program in the field of education prepares paraprofessionals in a variety of areas, emphasizing working with 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:
- Completion of the Educational Paraprofessional — Level I Certificate (13 units) as follows:
  - 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

Total Units 16.5 - 20.5

Electronic Cabling and Wiring Technology — Level II
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 the necessary 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). The typical job titles for these areas are: data or cable technician, low-voltage wiring technician, home theater installer, and security system installer.

The certificate encompasses a total of 20-21 units comprising two levels of certification. The level II certification (11-12 units) develops skills in electrical fundamentals, fabrication techniques, and basic computer skills in word processing, spreadsheets, database and the Internet. The level II certification (9 units) adds customer relations and advanced skills at the systems level in voice, video, and data for cable and wire systems (copper, coax, fiber, and structured cables); and the setup, maintenance, and troubleshooting of home theater systems, home automation, and home security systems.

Requirements for the Certificate
Required courses:
- ECWT 50 Electrical Fundamentals for Cable Installations 4.0
- ECWT 52 Fabrication Techniques for Cable Installations 4.0
- ELEC 11 Technical Applications in Microcomputers, or Microcomputer Applications 4.0 CU, UC

Total Units 11.0 - 12.0

Electronic Cabling and Wiring Technology — Level II
Electronics and Computer Technology Department
Certificate 60928

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 the necessary 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). The typical job titles for these areas are: data or cable technician, low-voltage wiring technician, home theater installer, and security system installer.

The certificate encompasses a total of 20-21 units comprising two levels of certification. The level II certification (11-12 units) develops skills in electrical fundamentals, fabrication techniques, and basic computer skills in word processing, spreadsheets, database and the Internet. The level II certification (9 units) adds customer relations and advanced skills at the systems level in voice, video, and data for cable and wire systems (copper, coax, fiber, and structured cables); and the setup, maintenance, and troubleshooting of home theater systems, home automation, and home security systems.

Requirements for the Certificate
Required courses:
- ECWT 50 Electrical Fundamentals for Cable Installations 4.0
- ECWT 52 Fabrication Techniques for Cable Installations 4.0
- ELEC 11 Technical Applications in Microcomputers, or Microcomputer Applications 4.0 CU, UC

Total Units 11.0 - 12.0

Recommended Electives:
- ELEC 61 Electronic Assembly and Fabrication 2.0
- ELEC 62 Advanced Surface Mount Assembly and Rework 2.0

Electronics and Computer-Engineering Technology
Electronics and Computer Technology Department
Certificate 60906

Requirements for the Certificate
Required courses:
- ELEC 11 Technical Applications in Microcomputers 3.0 CU
- ELEC 12 Computer Simulation and Troubleshooting 2.0
- ELEC 50A Electronics Theory 2.0 CU
- ELEC 50AL Electronics Laboratory 1.0 CU
- ELEC 50B Electronics Theory 2.0 CU
- ELEC 50BL Electronics Laboratory 1.0 CU
- ELEC 51 Electronic Devices Theory 3.0 CU
- ELEC 51L Electronic Devices Laboratory 1.0 CU
- ELEC 53 Communications Circuits Theory 3.0
- ELEC 53L Communications Circuits Laboratory 1.0
- ELEC 54A Industrial Circuits Theory 3.0 CU
- ELEC 54AL Industrial Circuits Laboratory 1.0 CU
- ELEC 54B Industrial Electronic Systems 2.0 CU
- ELEC 54BL Industrial Electronic Systems Laboratory 1.0 CU
- ELEC 55 Microwave Communications 3.0
- ELEC 55L Microwave Communications Laboratory 1.0
- ELEC 56 Digital Electronics 3.0 CU
- ELEC 56L Digital Electronics Laboratory 1.0 CU
- ELEC 61 Electronic Assembly and Fabrication 2.0
- ELEC 74 Microprocessor Systems 3.0 CU
- ELEC 74L Microprocessor Systems Laboratory 1.0 CU
- ELMA 65A Mathematics of Electronics 2.0 CU
- ELMA 65B Mathematics of Electronics 2.0 CU

Total Units 44.0
Recommended Electives:
- CSIS 41 Novell/SUSE Linux Enterprise Server Administration
- CSP 11 Basic Programming
- CSP 31 Programming in C++
- COMP 1A Computer Keyboarding
- ELEC 76 Technical Engineering Drawing I
- PHYS 2AG General Physics

Electronics Communications
Electronics and Computer Technology Department
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, PWM, 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. 3rd Class Technician License, and all students completing certificate programs are automatically eligible to receive, without further examination, the N.A.R.T.E. 4th Class Technician License.

Requirements for the Certificate

Required courses:
- ELEC 11 Technical Applications in Microcomputers 3.0 CSU
- ELEC 51L Electronic Devices Laboratory 1.0 CSU
- ELEC 53 Communications Circuits Theory 3.0

Total Units 33.0

Electronics Technology
Electronics and Computer Technology Department
Certificate 60905

This one-year program 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.

Requirements for the Certificate

Required courses:
- ELEC 11 Technical Applications in Microcomputers 3.0 CSU
- ELEC 50A Electronics Theory 2.0 CSU
- ELEC 50AL Electronics Laboratory 1.0 CSU
- ELEC 50B Electronics Theory 2.0 CSU
- ELEC 50BL Electronics Laboratory 1.0 CSU
- ELEC 51 Electronic Devices Theory 3.0 CSU
- ELEC 51L Electronic Devices Laboratory 1.0 CSU
- ELEC 52 Digital Electronics 3.0 CSU
- ELEC 56L Digital Electronics Laboratory 1.0 CSU
- ELEC 61 Electronic Assembly and Fabrication 2.0 CSU
- ELMA 65A Mathematics of Electronics 2.0 CSU
- ELMA 65B Mathematics of Electronics 2.0 CSU

Total Units 37.0

Emergency Medical Technician — Paramedic (EMT-P)

Medical Services Department
Certificate 61211

This Paramedic Program is accredited by CAAHEP (Commission on Accreditation of Allied Health Education Programs) and approved by the Los Angeles County Department of Health Services as meeting and exceeding the minimum standards as specified in Title 22 of the California Code of Regulations and the federal Department of Transportation national standard curriculum. It is designed to train paramedics to work on ambulances and in the fire service. The Emergency Medical Technician-Paramedic (EMT-P) is an individual who is educated and trained during an intensive (32-hours per week) didactic program lasting 16 weeks. This is followed by five (5) weeks of Clinical Internship in a hospital (40-hours per week), and then eight (8) weeks of Field Externship as a practicing Paramedic under the guidance and supervision of a Paramedic Field Preceptor.

Upon completion of the required courses in the Paramedic Program, the student is granted a Certificate of Completion as an Emergency Medical Technician-Paramedic (EMT-P) by the College. Students are then eligible for licensure by taking and passing both the National Registry Exam and County Paramedic accreditation exam.

Requirements for the Certificate

Required courses:
- EMS 1 Fundamentals for Paramedics 2.0
- EMS 10 Anatomy and Physiology for Paramedics 2.0
- EMS 20 Emergency Cardiac Care for Paramedics 1.0
- EMS 30 Pharmacology for Paramedics 2.0
- EMS 40 Cardiology for Paramedics 5.0
- EMS 50 Paramedic Skills Competency 4.5
- EMS 60 EMS Theory for Paramedics 8.5
- EMS 70 Paramedic Clinical Internship 3.5
- EMS 80 Paramedic Field Externship 8.5

Total Units 37.0

Recommended Electives:
- ADJI 1 The Administration of Justice System
- FIRE 1 Fire Protection Organization
- PSYC 1A Introduction to Psychology
- SOC 1 Sociology

The Emergency Medical Services faculty recommend that you complement your studies with selected elective courses chosen from the list above. You should meet with a professor of Emergency Medical Services to help you determine which of those electives would best suit your career plans.

Special Information:
To remain in the program, students must maintain a grade of “C” (80 percent) or better in all courses and receive a grade of “C” (80 percent) or better on all final exams, per state regulations. Before starting in clinical rotations, students must pass a criminal background check. Upon successful completion of the required courses, students are granted a Certificate of Completion for the Paramedic Program. Students are then eligible for licensure by taking and passing both the National Registry Exam and County Paramedic accreditation exam.

Application Requirements and Selection Procedures:

Application Requirements:
In addition to meeting the Mt. San Antonio College’s academic standards for admission, applicants must be in good standing and satisfy the following requirements:
1. an EMT-I, currently certified in California.
2. Submit a letter on official stationary from a recognized EMS agency verifying completion of six (6) months of pre-hospital field experience as an EMT-I (approximately 1,200 hours) within the last 2 years.
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 Health Science Programs Office (909) 594-5611, Ext. 4750. All applications are dated upon receipt in the Health Science Programs Office. The Paramedic Program begins three (3) 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 10 working days before the start 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 time to take the examination. The Assessment Center (909) 594-5611, Ext. 4265 is open Monday through Friday.
6. Successful completion of EMS 1 - Fundamentals for Paramedics.

7. Forward two (2) official transcripts of all coursework completed (high school, EMT-I, Fire Science, and college work other than Mt. San Antonio College courses). One transcript must be sent to the Health Science Programs Office; the other to the Admissions and Records Office.
Programs of Study Leading to a Certificate

For students who possess a college degree, the English placement examination is not required. However, it will be necessary for students to obtain two (2) official copies of the college transcript showing the degree issued. One official transcript must be sent to the Health Science Programs 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.

Example:
Mt. San Antonio College
Technology and Health Division
Psychiatric Technician 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.

Selection 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 1 — 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, anatomy and physiology, EMT basic knowledge and basic math skills in preparation for drug calculations.

Emergency Medical Technician 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
Required courses:
EMT 90 Emergency Medical Technician I 9.0
Total Units 9.0

Special Information:
To remain in the program, students must maintain a grade of "C" or better in the course.
Completion of the required course, which includes both written and practical qualifying examinations, will award the student an EMT-I Course Completion Certificate. Students are then eligible for certification by taking and passing the National Registry EMT-I certifying exam. This course is a prerequisite for the Paramedic Program and is required by most fire departments before the student may be hired as a firefighter.

Application Requirements and Selection Procedures:
Application Requirements:
1. Applicant must be 18 years of age upon entrance into the course.
2. High school graduate or equivalent.
3. File a college application and be accepted as a student at Mt. San Antonio College.
4. 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 clinical setting. 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.

Engineering Design Technology — Level I
Architecture and Engineering Design Department
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 enables 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 — Geometric Dimensioning and Tolerancing 3.0 CSU
EDT 16 Basic CAD and Computer Applications 4.0 CSU
Total Units 19.0 - 20.0

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 enables 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 — Geometric Dimensioning and Tolerancing 3.0 CSU
EDT 16 Basic CAD and Computer Applications 4.0 CSU
Total Units 30.0 - 32.0

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 — Geometric Dimensioning and Tolerancing 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 or 2.0 CSU
ELEC 50A Electronics Theory, and 2.0 CSU
ELEC 50AL Electronics Laboratory 1.0 CSU
Level II as follows:
EDT 20 Technical Descriptive Geometry 3.0 CSU
EDT 24 Engineering CAD 3-D Solids and Surfaces 3.0 CSU
MFG 11 Manufacturing Processes II or 2.0 CSU
ELEC 50A Electronics Theory, and 2.0 CSU
ELEC 50AL Electronics Laboratory 1.0 CSU
Family and Consumer Sciences Department Certificate 61316

The Family Child Care Certificate provides the information necessary for operating or owning a family child care business in the home.

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, or
- CHLD 10H Child Growth and Development – Honors 3.0 CSU, UC
- CHLD 92 Family Child Care 3.0

Plus the following courses:
- CHLD 64 Health, Safety and Nutrition of Young Children 3.0
- CHLD 68 Children with Special Needs 3.0 CSU
- CHLD 84 Guidance and Discipline in Child Development Settings 1.0

Total Units 19.0

**Fashion Design — Computer-Aided Family and Consumer Sciences Department 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 pattern making. 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.

Required courses:
- BUSA 11 Fundamentals of Accounting 3.0
- BUSR 50 Real Estate Principles 3.0 CSU
- BUSR 51 Legal Aspects of Real Estate 3.0
- BUSR 76 Escrow Procedures I 3.0
- BUSR 77 Escrow Procedures II 3.0
- CISB 15 Microcomputer Applications 4.0 CSU, UC

Total Units 25.0

Recommended Electives:
- FASH 17 Textiles 3.0 CSU, UC
- FASH 31 Fashion Design and Product Development II 3.0
- FASH 95 Field Studies in Merchandising — California 1.0

Total Units 40.0

**Fashion Design — Level II Family and Consumer Sciences Department Certificate 61309**

The Fashion Design: Level II Certificate builds upon the Level I Certificate to provide students with intermediate skills that will enhance their Fashion Design careers. Students will have a strategic view of historic costume research, and textile attributes and characteristics. Students will be exposed to additional categories and classifications of apparel and will further research and design product for divergent target markets. Students will prepare professional portfolios strengthen career perspectives. Completion of the Fashion Design: Level II Certificate will lead to new opportunities and provide students with a solid foundation upon which to build a career.

Required courses:
- BUSA 11 Fundamentals of Accounting 3.0
- BUSR 50 Real Estate Principles 3.0 CSU
- BUSR 51 Legal Aspects of Real Estate 3.0
- BUSR 76 Escrow Procedures I 3.0
- BUSR 77 Escrow Procedures II 3.0
- CISB 15 Microcomputer Applications 4.0 CSU, UC

Total Units 15.0

**Fashion Merchandising — Level I Family and Consumer Sciences Department 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.

Required courses:
- BUSA 11 Fundamentals of Accounting 3.0
- BUSR 50 Real Estate Principles 3.0 CSU
- BUSR 51 Legal Aspects of Real Estate 3.0
- BUSR 76 Escrow Procedures I 3.0
- BUSR 77 Escrow Procedures II 3.0
- CISB 15 Microcomputer Applications 4.0 CSU, UC

Total Units 15.0
**Programs of Study Leading to a Certificate**

### Fashion Merchandising — Level II

Family and Consumer Sciences Department Certificate 61303

The Fashion Merchandising Level II Certificate is designated to build upon the Fashion Merchandising — Level I Certificate to provide students with proven business and management tools that will increase their practical understanding of merchandising and marketing. Students will be exposed to projects and visual display simulations that will enhance their merchandising and management career potential.

**Requirements for the Certificate**

Completion of the Fashion Merchandising — Level I Certificate (15 units)

**Required courses:**

- FASH 8 Introduction to Fashion 3.0 CSU
- FASH 10 Clothing Fundamentals 3.0 CSU
- FASH 15 Fashion Strategies 3.0 CSU
- FASH 30 Fashion Design and Product Development 3.0
- FASH 62 Retail Store Management 3.0 CSU and Merchandising
- BUSS 50 Retail Store Management 3.0 CSU and Merchandising

**Plus the following courses:**

Level II as follows:

- FASH 1 History of Costume and Fashion 3.0 CSU
- FASH 17 Textiles 3.0 CSU, UC
- FASH 63 Advertising and Promotion, or 3.0 CSU, UC
- BUSS 33 Advertising and Promotion 3.0 CSU
- FASH 66 Visual Merchandising Display 3.0 CSU

**Total Units** 27.0

**Recommended Electives:**

- FASH 25 Fashion Computer-Assisted Drawing
- FASH 90 Field Studies
- FASH 91 Field Studies — New York
- FASH 92 Field Studies — Fashion Capitals
- FCS 41 Life Management

### Fire Administration

Fire Technology Department 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 positions as chief officers such as battalion chief, deputy chief, or division chief. Content focuses on advanced job skills in life safety, interpersonal skills, human resource management, investigation, command presence, and implementation of local/state fire regulations. This certificate meets the requirements of the California State Board of Fire Services Certified Fire Officer Program.

**Requirements for the Certificate**

**Required courses:**

- FIRE 20 Fire Instructor 1A 2.0
- FIRE 21 Fire Instructor 1B 2.0
- FIRE 30 Fire Management 1 2.0
- FIRE 40 Fire Prevention 1A 2.0
- FIRE 41 Fire Prevention 1B 2.0
- FIRE 50 Fire Command 1A 2.0
- FIRE 51 Fire Command 1B 2.0
- FIRE 60 Fire Investigation 1A 2.0

**Total Units** 16.0

### 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 Prevention 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

**PLUS**

Select two (2) courses from:

- FIRE 7 Fire Fighting Tactics and Strategy 3.0 CSU
- FIRE 8 Fire Company Organization and Management 3.0 CSU
- 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 86 Basic Fire Academy 12.0
- PE-F 53 Physical Training for the Basic Fire Academy 2.5 CSU

**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

### Fitness Specialist/Personal Trainer

Physical Education Department 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:**

- PE 10 Administration of Fitness Programs 2.0
- PE 24 Kinesiology 2.0
- PE 38 Physiology of Exercise for Fitness 3.0
- PE 39 Techniques of Fitness Testing 2.0 CSU
- PE 40 Techniques of Teaching Cardiovascular Exercise 2.0
- PE 41 Techniques of Teaching Weight Training 2.0
- PE 85 Fitness Specialist Internship 1.0

**Total Units** 17.0

**Recommended Electives:**

- DANCE 39A Alignment and Correctives I
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
AGOR 26 Floral Design II 3.0 CSU
AGOR 29 Ornamental Plants — Herbaceous 3.0 CSU, UC
AGOR 32 Landscaping and Nursery Management 3.0 CSU
Total Units 21.0

Foster Care
Family and Consumer Sciences Department
Certificate 61317
This certificate requires the completion of twelve (12) units.

Requirements for the Certificate
Required courses:
CHLD 1 Child, Family and Community 3.0 CSU
CHLD 10 Child Growth and Development 3.0 CSU, UC
CHLD 10H Child Growth and Development – Honors 3.0 CSU, UC
SOC 15 Child Development 3.0 CSU, UC
CHLD 68 Children with Special Needs 3.0 CSU
CHLD 95 Issues in Foster Parenting 1.0
CHLD 96 Discipline and Adjustment in Foster Care 1.0
CHLD 97 Independent Living Through Foster Care 1.0
Total Units 12.0

Gallery Design/Operation and Art Profession
Art Department
Certificate 61020
This certificate is designed to provide students with the necessary theoretical and practical knowledge and skills to display an aesthetically 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
Required courses:
ARTG 20 Intro Exhibition Design and Professional Practice 3.0 CSU
ARTG 21A Introduction to Exhibition Production 3.0 CSU
ARTG 21B Intermediate Exhibition Production 3.0
ARTG 22A Exhibition Design and Art Gallery Operation Work Experience 1.0
PLUS Select one (1) course from:
COMP 60 Desktop Publishing with InDesign or Pagemaker 4.0 CSU
COMP 62 Desktop Publishing with QuarkXpress 4.0
Total Units 17.0

Geographic Information Systems
History, Art History, Geography, Political Science
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.

Geographic Information Systems
History, Art History, Geography, Political Science
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 knowledge of GIS for better understanding or to support their current job activities.

Requirements for the Certificate
Required courses:
GEOG 3 Map Reading and Interpretation 3.0 CSU
GEOG 10 Introduction to Geographic Information Systems 3.0 CSU, UC
GEOG 11 Intermediate GIS 3.0
Total Units 9.0

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 in Agriculture 3.0 CSU, UC
AGAG 59 Work Experience in Horse Ranch Management 4.0 CSU, UC
AGAG 60 Work Experience in Horse Production 4.0 CSU, UC
AGAG 61 Work Experience in Horse Breeding 4.0 CSU, UC
AGAN 2 Animal Nutrition 3.0 CSU
AGAN 94 Animal Breeding 3.0
AGLI 16 Horse Production, or 4.0 CSU, UC
AGLI 18 Horse Ranch Management 4.0 CSU
AGLI 19 Horse Hoof Care 2.0 CSU
AGLI 96 Animal Sanitation and Disease Control 3.0 CSU
AGLI 97 Artificial Insemination of Livestock 2.0
Total Units 21.0 - 24.0

Hospitality: Catering
Family and Consumer Sciences Department
Certificate 61315
The Hospitality: Catering Certificate will prepare students for catering and banquet job opportunities in the hospitality industry. The program emphasizes menu planning, food preparation, service and catering management.

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 3.0 CSU
HRM 54 Basic Cooking Techniques 3.0 CSU
HRM 61 Menu Planning 3.0 CSU
HRM 62 Catering 3.0 CSU
HRM 91 Work Experience in Restaurant/Hospitality 1.0 CSU
NF 20 Principles of Foods with Lab 3.0 CSU
Total Units 20.5

Hospitality: Food Services
Family and Consumer Sciences Department
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
Required courses:
HRM 51 Introduction to Hospitality 3.0 CSU
HRM 52 Food Safety and Sanitation 1.5 CSU
HRM 53 Dining Room Service 3.0 CSU
Total Units 7.5

Hospitality: Hospitality Management — Level I
Family and Consumer Sciences Department
Certificate 61332
The Hospitality: Hospitality Management — Level I Certificate prepares the holder for an entry-level position within the hospitality industry.
Programs of Study Leading to a Certificate

Requirements for the Certificate

**Hospitality: Restaurant Management — Level II**
Family and Consumer Sciences Department Certificate 61319

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

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>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 Management</td>
<td>1.5</td>
</tr>
<tr>
<td>HRM 53</td>
<td>Dining Room Service Management</td>
<td>3.0</td>
</tr>
<tr>
<td>HRM 54</td>
<td>Basic Cooking Techniques</td>
<td>3.0</td>
</tr>
<tr>
<td>HRM 55</td>
<td>Restaurant Cost Control</td>
<td>3.0</td>
</tr>
<tr>
<td>HRM 61</td>
<td>Menu Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>NF 28</td>
<td>Cultural and Ethnic Foods</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units**: 19.5

**Industrial Electronics**

Electronics and Computer Technology Department Certificate 60908

This curriculum is one of three advanced systems options available for those who do not complete all advanced systems courses at one time, or who complete them one at a time. The Industrial Electronics curriculum encompasses advanced coursework in industrial electronics. This includes electronic devices for industrial controls and motor controls. The curriculum culminates in programmable logic controls using the Allen Bradley series of PLCs running Windows ladder logic software. 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.

**Required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 50A</td>
<td>Electronics Theory</td>
<td>2.0</td>
</tr>
<tr>
<td>ELEC 50AL</td>
<td>Electronics Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ELEC 50B</td>
<td>Electronics Theory</td>
<td>2.0</td>
</tr>
<tr>
<td>ELEC 50BL</td>
<td>Electronics Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ELEC 51</td>
<td>Electronic Devices Theory</td>
<td>3.0</td>
</tr>
<tr>
<td>ELEC 51L</td>
<td>Electronic Devices Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ELEC 54A</td>
<td>Industrial Circuits Theory</td>
<td>3.0</td>
</tr>
<tr>
<td>ELEC 54AL</td>
<td>Industrial Circuits Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ELEC 54B</td>
<td>Industrial Electronic Systems</td>
<td>2.0</td>
</tr>
<tr>
<td>ELEC 54BL</td>
<td>Industrial Electronic Systems Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ELEC 56</td>
<td>Digital Electronics</td>
<td>3.0</td>
</tr>
<tr>
<td>ELEC 56L</td>
<td>Digital Electronics Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ELEC 61</td>
<td>Electronic Assembly and Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>ELMA 65A</td>
<td>Mathematics of Electronics</td>
<td>2.0</td>
</tr>
<tr>
<td>ELMA 65B</td>
<td>Mathematics of Electronics</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Total Units**: 32.0

**Infant/Toddler Development**

Family and Consumer Sciences Department 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 7</td>
<td>Child, Family and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 5</td>
<td>Principles/Practices in Child Development Programs</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 6</td>
<td>Survey of Child Development Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 10</td>
<td>Child Growth and Development, Jr.</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>CHLD 1H</td>
<td>Infants/Toddler Care and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHLD 6H</td>
<td>Infants At Risk</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units**: 10.0

**Interior Design Level I — Merchandising**

Family and Consumer Sciences Department 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>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 11</td>
<td>Architectural Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 16</td>
<td>Basic CAD and Computer Application</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Units**: 30.0

Information and Operating Systems Security

Computer Information Systems Department 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</th>
<th>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>
</tbody>
</table>

**Total Units**: 10.0

**Programs of Study Leading to a Certificate**

CHLD 62 Music and Motor Development for Young Children | 3.0 |
CHLD 64 Health, Safety and Nutrition of Young Children | 3.0 |
CHLD 72 Teacher, Parent, and Child Relationships | 3.0 |
INTRODUCTION TO COMPUTER INFORMATION TECHNOLOGY

The 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, web/computer programming, and the Internet.

Requirements for the Certificate

Required courses:

- BUSA 7 Principles of Accounting — Financial 5.0 CSU, UC
- ID 250 Codes and Specifications for Interior Design 2.0 CSU
- ID 260 Rendering and Rapid Visualization 2.0 CSU
- ID 265 Interior Design Studio III – Kitchens 2.0 CSU
- ID 275 Interior Design Studio IV – Bath Design 2.0 CSU

Total Units 24.0

Kitchen and Bath Design

Family and Consumer Sciences Department 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 11 Architectural Drawing 3.0 CSU, UC
- ARCH 16 Basic CAD and Computer Application 4.0 CSU, UC
- BUSA 7 Principles of Accounting — Financial 5.0 CSU, UC
- ID 250 Codes and Specifications for Interior Design 2.0 CSU
- ID 260 Rendering and Rapid Visualization 2.0 CSU
- ID 265 Interior Design Studio III – Kitchens 2.0 CSU
- ID 275 Interior Design Studio IV – Bath Design 2.0 CSU

Total Units 24.0

Interior Landscape

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

Required courses:

- AGOR 1 Horticultural Science 3.0 CSU
- AGOR 13 Landscape Design 3.0 CSU
- AGOR 15 Interior Landscaping 3.0
- AGOR 24 Integrated Pest Management 3.0 CSU

Total Units 24.0

Programs of Study Leading to a Certificate

Section 8
### Programs of Study Leading to a Certificate

**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 30 Ornamental Plants – Trees and Woody Shrubs 3.0 CSU, UC  
- AGOR 39 Turf Grass Production and Management 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 Fundamentals 3.0 CSU  

**Total Units** 30.0

**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:
- 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

**Total Units** 27.0
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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSL 10</td>
<td>Introduction to Paralegal/Legal</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>BUSL 15A</td>
<td>Law Office Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 15B</td>
<td>Automated Law Office Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSO 5</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSO 25</td>
<td>Business Communications</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>COMP 1</td>
<td>Computer Keyboarding</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 2</td>
<td>Intermediate Computer Keyboarding</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 11</td>
<td>Internet Research for Business</td>
<td>2.0 CU</td>
</tr>
<tr>
<td>COMP 12</td>
<td>Office Computer Applications, or</td>
<td>4.0 CU, UC</td>
</tr>
<tr>
<td>CISB 15</td>
<td>Microcomputer Applications</td>
<td>4.0 CU, UC</td>
</tr>
<tr>
<td>COMP 20</td>
<td>Microsoft Word, or</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 120B</td>
<td>Microsoft Word – Level 2</td>
<td>1.0</td>
</tr>
<tr>
<td>COMP 28</td>
<td>Office Management Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>COMP 29</td>
<td>Computer Keyboarding</td>
<td>0.5</td>
</tr>
<tr>
<td>COMP 68</td>
<td>Transcription Techniques</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**PLUS**
Select six (6) units from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 71</td>
<td>Landscape Construction Fundamentals</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>BUSM 20</td>
<td>Principles of Business</td>
<td>3.0 CU, UC</td>
</tr>
<tr>
<td>BUSM 66</td>
<td>Small Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSS 33</td>
<td>Professional Selling</td>
<td>3.0 CU</td>
</tr>
<tr>
<td>BUSS 36</td>
<td>Principles of Marketing</td>
<td>3.0 CU</td>
</tr>
</tbody>
</table>

**Total Units 42.0**

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 Registered 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 of 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 Course**
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 lower 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.
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 Nursing**

- **NURS 5** Psychiatric Nursing 3.0 CU
- **NURS 8** Medical-Surgical Nursing: Circulation and Oxygenation 5.0 CU
- **NURS 9** Leadership in Nursing 1.0 CU
- **NURS 10** Medical-Surgical Nursing: Integration/Regulation 4.0 CU
- **NURS 11** Preceptorship in Nursing 2.0 CU

**Total Units 15.0**

Programs of Study Leading to a Certificate

**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:**
1. Once a student has completed all course prerequisites, they may request an appointment with a counselor or educational advisor.
2. Students who have completed coursework at other colleges must bring the following information to their eligibility appointment:
   a. Official transcripts of all college work completed at all colleges.
   b. If the prerequisite courses were completed at another college, a course description and a copy of the course syllabus.
   c. 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 following information to their appointment (students may be able to obtain a list of agencies from the Admissions Office).
   d. All students will need to bring official proof of high school graduation, GED, or college graduation from an accredited institution in the United States.

**Appointments for Eligibility Verification will only be made during the Following Months:**
September 1 - November 30
March 1 - May 30

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 fingerprinting by the Office of Inspector General for welfare or Social Security fraud, as well as testing negative for drug use.
Programs of Study Leading to a Certificate

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 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 judgment/action which could result in death of a patient
- 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 for others.

### Machine Operator
**Aircraft Maintenance Technology & Manufacturing Department Certificate 60956**

This certificate provides a foundation of basic skills for employment in a variety of entry-level manufacturing positions.

**Requirements for the Certificate**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG 11</td>
<td>2.0</td>
<td>Manual and CNC Manufacturing Essentials</td>
</tr>
<tr>
<td>MFG 12</td>
<td>2.0</td>
<td>Advanced Manufacturing Processes</td>
</tr>
<tr>
<td>MFG 58</td>
<td>2.0</td>
<td>Blueprint Reading for Manufacturing</td>
</tr>
<tr>
<td>MFG 70</td>
<td>2.0</td>
<td>Technical Mathematics – Manufacturing Applications</td>
</tr>
<tr>
<td>MFG 85</td>
<td>2.0</td>
<td>Manual CNC (Computerized Numerical Control) Operations</td>
</tr>
</tbody>
</table>

**PLUS**
Select two (2) courses from:
- MFG 25 Advanced Parametric Solid 2.0
- MFG 27 Autodesk Inventor 2.0
- WELD 40 Introduction to Welding 2.0

Total Units 30.0

### Manufacturing Technology
**Aircraft Maintenance Technology & Manufacturing Department 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG 11</td>
<td>2.0</td>
<td>Manufacturing Processes I</td>
</tr>
<tr>
<td>MFG 12</td>
<td>2.0</td>
<td>Manufacturing Processes II</td>
</tr>
<tr>
<td>MFG 15</td>
<td>2.0</td>
<td>AutoCAD 2D</td>
</tr>
<tr>
<td>MFG 17</td>
<td>2.0</td>
<td>3-D CAD – Mechanical Modeling</td>
</tr>
<tr>
<td>MFG 19</td>
<td>2.0</td>
<td>Parametric Solid Modeling for Manufacturing</td>
</tr>
<tr>
<td>MFG 38</td>
<td>2.0</td>
<td>MasterCAM I</td>
</tr>
<tr>
<td>MFG 38B</td>
<td>2.0</td>
<td>Advanced MasterCAM</td>
</tr>
<tr>
<td>MFG 38C</td>
<td>2.0</td>
<td>MasterCAM Solids</td>
</tr>
<tr>
<td>MFG 39</td>
<td>2.0</td>
<td>SurfCAM I</td>
</tr>
<tr>
<td>MFG 39B</td>
<td>2.0</td>
<td>SurfCAM II</td>
</tr>
<tr>
<td>MFG 58</td>
<td>2.0</td>
<td>Blueprint Reading for Manufacturing</td>
</tr>
<tr>
<td>MFG 70</td>
<td>2.0</td>
<td>Technical Mathematics – Manufacturing Applications</td>
</tr>
<tr>
<td>MFG 85</td>
<td>2.0</td>
<td>Manual CNC (Computerized Numerical Control) Operations</td>
</tr>
</tbody>
</table>

Total Units 12.0

### Marketing Management
**Business Administration Department Certificate 60510**

Requirements for the Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSM 20</td>
<td>3.0</td>
<td>Principles of Business</td>
</tr>
<tr>
<td>BUSM 61</td>
<td>3.0</td>
<td>Business Organization and Management</td>
</tr>
<tr>
<td>BUSS 35</td>
<td>3.0</td>
<td>Professional Selling</td>
</tr>
<tr>
<td>BUSS 36</td>
<td>3.0</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>BUSS 50</td>
<td>3.0</td>
<td>Retail Store Management and Merchandising</td>
</tr>
<tr>
<td>BUSS 70</td>
<td>3.0</td>
<td>International Marketing Concepts</td>
</tr>
<tr>
<td>BUSS 79</td>
<td>1.0</td>
<td>Work Experience in Marketing Management</td>
</tr>
<tr>
<td>CISM 15</td>
<td>4.0</td>
<td>Microcomputer Applications</td>
</tr>
</tbody>
</table>

Total Units 25.0

### MasterCAM
**Aircraft Maintenance Technology & Manufacturing Department 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>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG 11</td>
<td>2.0</td>
<td>Manufacturing Processes I</td>
</tr>
<tr>
<td>MFG 38</td>
<td>2.0</td>
<td>MasterCAM I</td>
</tr>
</tbody>
</table>

Total Units 8.0

### 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSS 72</td>
<td>5.0</td>
<td>Bookkeeping – Accounting</td>
</tr>
<tr>
<td>BUSS 5</td>
<td>3.0</td>
<td>Business English</td>
</tr>
<tr>
<td>BUSS 25</td>
<td>3.0</td>
<td>Business Communications</td>
</tr>
<tr>
<td>COMP 1</td>
<td>4.0</td>
<td>Intermediate Computer</td>
</tr>
<tr>
<td>COMP 2</td>
<td>4.0</td>
<td>Computer Keyboarding</td>
</tr>
<tr>
<td>COMP 12</td>
<td>4.0</td>
<td>Office Computer Applications</td>
</tr>
<tr>
<td>COMP 18</td>
<td>3.0</td>
<td>Data Entry</td>
</tr>
<tr>
<td>COMP 20</td>
<td>4.0</td>
<td>Microsoft Word</td>
</tr>
<tr>
<td>COMP 120A</td>
<td>1.0</td>
<td>Microsoft Word – Level 1, and</td>
</tr>
<tr>
<td>COMP 120B</td>
<td>1.0</td>
<td>Microsoft Word – Level 2</td>
</tr>
<tr>
<td>COMP 28</td>
<td>3.0</td>
<td>Office Management Skills</td>
</tr>
<tr>
<td>COMP 68</td>
<td>3.0</td>
<td>Transcription Techniques</td>
</tr>
<tr>
<td>MEDI 90</td>
<td>3.0</td>
<td>Medical Terminology</td>
</tr>
</tbody>
</table>

Total Units 37.0 - 39.0

The core courses for the Medical Specialist 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**

Upon completion of the required courses, a Certificate in Psychiatric Technician will be awarded. In addition, it prepares the student to take the California State Board Examination for Psychiatric Technicians.
## Requirements for the Certificate

### Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENT 40</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 40</td>
<td>3.0</td>
</tr>
<tr>
<td>MENT 56</td>
<td>9.0</td>
</tr>
<tr>
<td>MENT 56L</td>
<td>4.0</td>
</tr>
<tr>
<td>MENT 58</td>
<td>2.0</td>
</tr>
<tr>
<td>MENT 58L</td>
<td>1.5</td>
</tr>
<tr>
<td>MENT 70</td>
<td>1.5</td>
</tr>
<tr>
<td>MENT 70L</td>
<td>2.0</td>
</tr>
<tr>
<td>MENT 71</td>
<td>2.0</td>
</tr>
<tr>
<td>MENT 72L</td>
<td>7.0</td>
</tr>
<tr>
<td>MENT 73L</td>
<td>5.0</td>
</tr>
<tr>
<td>MENT 73T</td>
<td>6.0</td>
</tr>
<tr>
<td>PSYC 1A</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Total Units: 51.0

### 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 and Selection Procedures:

#### 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.
- **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 (ALE). 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 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

### Microcomputer Productivity Software

**Computer Information Systems Department 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:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISB 13</td>
<td>2.0</td>
</tr>
<tr>
<td>CISB 21</td>
<td>4.0</td>
</tr>
<tr>
<td>CISB 15</td>
<td>4.0</td>
</tr>
<tr>
<td>CISB 15</td>
<td>4.0</td>
</tr>
<tr>
<td>CISD 11</td>
<td>4.0</td>
</tr>
<tr>
<td>CSW 11</td>
<td>4.0</td>
</tr>
<tr>
<td>COMP 50</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Units: 22.0 - 24.0**

---

### Programs of Study Leading to a Certificate

#### 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:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 1</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 2</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 24</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 29</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 30</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 32</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 39</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 62</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 64</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units: 27.0**

#### Nutrition Program Assistant — Level I

**Family and Consumer Sciences Department Certificate 61331**

This certificate program prepares students to work for community agencies and programs as nutrition assistants.

### Requirements for the Certificate

**Required courses:**

<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>
<tr>
<td>NF 25H</td>
<td>3.0</td>
</tr>
<tr>
<td>NF 10</td>
<td>3.0</td>
</tr>
<tr>
<td>NF 28</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units: 10.5**
### Nutrition Program Assistant — Level II: Child Program Emphasis

**Family and Consumer Sciences Department 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 to entry-level positions in nutrition programs that serve children.

**Requirements for the Certificate**

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>CSU, UC</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>NF 20</td>
<td>Principles of Foods with Lab</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>NF 25</td>
<td>Essentials of Nutrition, or</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>NF 25H</td>
<td>Essentials of Nutrition — Honors, or</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>NF 10</td>
<td>Nutrition for Personal Health and Wellness</td>
<td>3.0</td>
<td>CSU</td>
</tr>
<tr>
<td>NF 28</td>
<td>Cultural and Ethnic Foods</td>
<td>3.0</td>
<td>CSU, UC</td>
</tr>
</tbody>
</table>

**Plus the following courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 81</td>
<td>Cooking for Your Heart and Health</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 34</td>
<td>Fitness for Living</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 40</td>
<td>Introduction to Interviewing and Counseling</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 17.5

### Parametric Solid Modeling

**Aircraft Maintenance Technology & Manufacturing Department Certificate 60923**

With the strong relationship between AutoCAD and Manufacturing, this mini certificate glides the student through AutoDesk’s 2-D, 3-D, Mechanical Desktop, and Inventors packages and relates them to real-life industrial usage.

**Requirements for the Certificate**

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG 15</td>
<td>AutoCAD 2D</td>
<td>2.0</td>
</tr>
<tr>
<td>MFG 17</td>
<td>3-D CAD – Mechanical Modeling</td>
<td>2.0</td>
</tr>
<tr>
<td>MFG 19</td>
<td>Parametric Solid Modeling for Manufacturing</td>
<td>2.0</td>
</tr>
<tr>
<td>MFG 25</td>
<td>Advanced Parametric Solid Modeling for Manufacturing</td>
<td>2.0</td>
</tr>
<tr>
<td>MFG 27</td>
<td>Autodesk Inventor</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Total Units** 10.0

### Pet Science

**Agricultural Sciences Department Certificate 61014**

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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 24</td>
<td>Integrated Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 30</td>
<td>Ornamental Plants — Trees and Woody Shrubs</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 39</td>
<td>Turf Grass Production and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 51</td>
<td>Tractor and Landscape Equipment Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 62</td>
<td>Landscape Irrigation – Design and Installation</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 63</td>
<td>Landscape Irrigation Systems Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 75</td>
<td>Urban Arboriculture</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 30.0

### 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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 1</td>
<td>Horticultural Science</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 4</td>
<td>Park Management</td>
<td>3.0</td>
</tr>
<tr>
<td>AGOR 5</td>
<td>Park Facilities</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 35.0

### Photography

**Photographics Department Certificate 61002**

This certificate program is designed to prepare students to develop specific skills needed for employment in photography, art, cinema/animation, communications, industrial arts, graphics, and journalism.

**Requirements for the Certificate**

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 10</td>
<td>Photo Editing with Photoshop</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 10</td>
<td>Basic Digital and Film</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 11</td>
<td>Advanced Professional Photography</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 12</td>
<td>Photographic Alternatives, or</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 21</td>
<td>Exploring Color Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 16</td>
<td>Fashion Photography, or</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 18</td>
<td>Portraiture and Wedding Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 17</td>
<td>Photocommunication</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 20</td>
<td>Color Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 28</td>
<td>Photography Portfolio</td>
<td>2.0</td>
</tr>
<tr>
<td>PHOT 30</td>
<td>Commercial and Illustrative Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total Units** 27.0

**Recommended Electives:**

- AHIS 1: Understanding the Visual Arts, or
- ARTB 1: Understanding the Visual Arts
- CISP 1: Programming in C++
- CISP 2: Computer Information Systems Department Certificate 60704

**Requirements for the Certificate**

**Required courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISP 12</td>
<td>Advanced Programming in C++</td>
<td>4.0</td>
</tr>
<tr>
<td>CISP 21</td>
<td>Programming in Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CISP 20</td>
<td>Windows Operating System</td>
<td>4.0</td>
</tr>
<tr>
<td>CISP 31</td>
<td>Programming in C++</td>
<td>4.0</td>
</tr>
<tr>
<td>CISP 34</td>
<td>Advanced C++ Programming</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Units** 27.0

---

**Notes:**

- CSU: California State University
- UC: University of California
- CSU, UC: California State University and University of California
- or: Optional or additional course

---

**Programs of Study Leading to a Certificate**

**Program Emphasis**

- Nutrition Program Assistant — Level I: Child Program Emphasis
- Nutrition Program Assistant — Level II: Child Program Emphasis
- Nutrition Program Assistant — Level II: Weight Management Program Emphasis

**Coursework:**

- Essentials of Nutrition
- Nutrition for Personal Health and Wellness
- Cultural and Ethnic Foods

---

**Total Units 17.5**

---

**Program Emphasis**

- Parametric Solid Modeling
- Pet Science
- Park Management
- Photography

**Coursework:**

- AutoCAD 2D
- 3-D CAD – Mechanical Modeling
- Parametric Solid Modeling for Manufacturing
- Advanced Parametric Solid Modeling for Manufacturing

**Total Units 10.0**

---

**Program Emphasis**

- Nutrition Program Assistant — Level II: Weight Management Program Emphasis

**Coursework:**

- Essentials of Nutrition, or
- Nutrition for Personal Health and Wellness
- Cultural and Ethnic Foods

**Total Units 17.5**

---

**Program Emphasis**

- Parametric Solid Modeling
- Pet Science
- Park Management
- Photography

**Coursework:**

- AutoCAD 2D
- 3-D CAD – Mechanical Modeling
- Parametric Solid Modeling for Manufacturing

**Total Units 10.0**

---

**Program Emphasis**

- Nutrition Program Assistant — Level II: Weight Management Program Emphasis

**Coursework:**

- Essentials of Nutrition, or
- Nutrition for Personal Health and Wellness
- Cultural and Ethnic Foods

**Total Units 17.5**

---

**Program Emphasis**

- Parametric Solid Modeling
- Pet Science
- Park Management
- Photography
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:

<table>
<thead>
<tr>
<th>Course</th>
<th>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>CISD 11</td>
<td>Database Management — Microcomputers</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>CSP11</td>
<td>Basic Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CSP14</td>
<td>Advanced Basic Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>27.0</td>
</tr>
</tbody>
</table>

Radio Broadcasting: Behind the Scenes
Art Department
Certificate 60606

The Behind-the-Scenes Radio Broadcasting Certificate is designed for students who are interested in the non-performance side of the industry. Students will receive instruction in the various functions of a radio station as they exist independently and in conjunction with the on-the-air product.

Requirements for the Certificate
Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-TV 01</td>
<td>Introduction to Broadcasting</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 09</td>
<td>Broadcast Sales and Promotion</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 10</td>
<td>Radio Management and Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 11A</td>
<td>Beginning Radio Production</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 11B</td>
<td>Advanced Radio Production</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 15</td>
<td>Broadcast Business Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 16</td>
<td>Broadcast Career Preparation</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 97A</td>
<td>Radio/Entertainment Industry Seminar</td>
<td>1.0</td>
</tr>
<tr>
<td>R-TV 97B</td>
<td>Radio/Entertainment Industry Internship</td>
<td>1.0</td>
</tr>
<tr>
<td>R-TV 97C</td>
<td>Entertainment Industry Internship — KSAK Radio</td>
<td>1.0</td>
</tr>
<tr>
<td>R-TV 97D</td>
<td>Entertainment Industry Internship — KSAK Radio</td>
<td>2.0</td>
</tr>
<tr>
<td>PLUS</td>
<td>Select six (6) units from:</td>
<td></td>
</tr>
<tr>
<td>R-TV 03</td>
<td>Sportscasting and Reporting</td>
<td>1.5</td>
</tr>
<tr>
<td>R-TV 05</td>
<td>Radio-TV Newswriting</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 06</td>
<td>Broadcast Traffic Reporting</td>
<td>1.5</td>
</tr>
<tr>
<td>R-TV 08</td>
<td>KSAK Radio Studio Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>R-TV 10</td>
<td>Radio Management and Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 12</td>
<td>Commercial Copywriting</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 17</td>
<td>Internet Radio Broadcasting</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 26</td>
<td>Legal Issues in Entertainment Law</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 27</td>
<td>Radio Drama</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>33.0 - 34.0</td>
</tr>
</tbody>
</table>

Radio Broadcasting: On the Air
Art Department
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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-TV 01</td>
<td>Introduction to Broadcasting</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 02</td>
<td>Radio and Television</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 05</td>
<td>Radio and Television — Announcing</td>
<td></td>
</tr>
<tr>
<td>R-TV 07</td>
<td>Commercial Voice-Overs</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 11A</td>
<td>Beginning Radio Production</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 11B</td>
<td>Advanced Radio Production</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 15</td>
<td>Broadcast Business Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 16</td>
<td>Broadcast Career Preparation</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 95A</td>
<td>Radio Station Activities, or</td>
<td>1.0</td>
</tr>
<tr>
<td>R-TV 95B</td>
<td>Radio Station Activities, or</td>
<td>2.0</td>
</tr>
<tr>
<td>R-TV 95C</td>
<td>Radio Station Activities</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 97A</td>
<td>Radio Broadcasting Seminar</td>
<td>1.0</td>
</tr>
<tr>
<td>R-TV 97B</td>
<td>Radio Broadcasting Internship</td>
<td>1.0</td>
</tr>
<tr>
<td>PLUS</td>
<td>Select six (6) units from:</td>
<td></td>
</tr>
<tr>
<td>R-TV 03</td>
<td>Sportscasting and Reporting</td>
<td>1.5</td>
</tr>
<tr>
<td>R-TV 04</td>
<td>Broadcast News Field Reporting</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 06</td>
<td>Broadcast Traffic Reporting</td>
<td>1.5</td>
</tr>
<tr>
<td>R-TV 08</td>
<td>KSAK Radio Studio Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>R-TV 10</td>
<td>Radio Management and Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 12</td>
<td>Commercial Copywriting</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 17</td>
<td>Internet Radio Broadcasting</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 26</td>
<td>Legal Issues in Entertainment Law</td>
<td>3.0</td>
</tr>
<tr>
<td>R-TV 27</td>
<td>Radio Drama</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>33.0 - 35.0</td>
</tr>
</tbody>
</table>

Real Estate
Business Administration Department
Certificate 60512

Requirements for the Certificate
Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 52</td>
<td>Real Estate Practice, or</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 52D</td>
<td>Real Estate Practice Work — Experience</td>
<td>4.0</td>
</tr>
<tr>
<td>BUSR 53</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 54</td>
<td>Real Estate Appraisal</td>
<td>3.0</td>
</tr>
<tr>
<td>PLUS</td>
<td>Select one (1) course from:</td>
<td></td>
</tr>
<tr>
<td>BUSA 11</td>
<td>Fundamentals of Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSL 18</td>
<td>Business Law</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 55</td>
<td>Real Estate Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 57</td>
<td>Income Tax Aspects of Real Estate Investments</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 59</td>
<td>Real Estate Property Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 76</td>
<td>Escrow Procedures I</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>18.0 - 19.0</td>
</tr>
</tbody>
</table>

Real Estate Appraisal
Business Administration Department
Certificate 60513

Requirements for the Certificate
Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSR 50</td>
<td>Real Estate Principles</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 53</td>
<td>Real Estate Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 54</td>
<td>Real Estate Appraisal</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 54SE</td>
<td>Standards, Ethics and Statistics for Professional Practice</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSR 56</td>
<td>Advanced Real Estate Appraisal</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 66</td>
<td>General Appraiser Report</td>
<td>3.0</td>
</tr>
<tr>
<td>CISP 15</td>
<td>Microcomputer Applications</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23.5</td>
</tr>
</tbody>
</table>

Recreation Technology
Physical Education Department
Certificate 62104

The Recreation Technology Certificate prepares students for careers in recreation and leisure services including public recreation, non-profit organizations, commercial recreation, recreation therapy travel and tourism.

Requirements for the Certificate
Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSR 52</td>
<td>Real Estate Practice, or</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 55</td>
<td>Real Estate Appraisal</td>
<td>3.0</td>
</tr>
<tr>
<td>BUSR 62</td>
<td>Mortgage Loan Brokering and Lending</td>
<td>3.0</td>
</tr>
<tr>
<td>INSP 70</td>
<td>Elements of Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23.5</td>
</tr>
</tbody>
</table>

Programs of Study Leading to a Certificate
Section 8
93
Programs of Study Leading to a Certificate

School Age Child — Specialization
Family and Consumer Sciences Department
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).

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, Jr 3.0 CSU, UC
- CHLD 10H Child Growth and Development — Honors 3.0 CSU, UC
- CHLD 50 Multicultural Education: Anti-Bias Perspective 3.0
- CHLD 51 Early Literacy in Child Development 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 74 Program Planning for the School Age Child 3.0

PLUS Select one (1) course from:
- ENGL 64 Writing Effective Sentences 1.0
- ENGL 65 Grammar Review 1.0
- LIT 40 Children’s Literature 3.0 CSU

PLUS Select three (3) units from:
- LERN 49 Math Skills Review 3.0
- MATH 50 Pre-Algebra 3.0

Total Units 31.0 - 33.0

Sign Language/Interpreting
Sign Language Department Certificate 60801
Upon completion of this program, the graduate will be functional in sign language and will be able to interpret in a variety of situations. The program provides an overview of the Deaf community, careers working with deaf people, teaches American Sign Language, offers specific interpreting courses, and includes training in the ethics and practical approaches that must be understood by a practicing interpreter.

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

Requirements for the Certificate

Required courses:
- SIGN 80 American Sign Language I 4.0 CSU, UC
- SIGN 81 American Sign Language II 4.0 CSU, UC
- SIGN 82 American Sign Language III 4.0 CSU, UC
- SIGN 82A American Sign Language IV 4.0 CSU, UC
- SIGN 82C American Sign Language V 4.0
- SIGN 83 Deaf Perspectives 3.0
- SIGN 85 American Deaf Culture 3.0 CSU, UC
- SIGN 86 American Sign Language Structure 3.0 CSU, UC
- SIGN 87 Translation: American Sign Language/English 3.0
- SIGN 88 Principles of Sign Language Interpreting 3.0
- SIGN 88A Interpreting 4.0
- SIGN 88B Advanced Interpreting 4.0
- SIGN 88L Practicum 1.0
- SPCH 1A Public Speaking, Jr 3.0 CSU, UC
- SPCH 1AH Public Speaking — Honors 3.0 CSU, UC

Total Units 47.0

Recommended Electives:
- SIGN 89 Finger Spelling
- SIGN 92 Oral Interpreting
- SIGN 99 Special Projects in Sign Language/Interpreting

Sports Turf Management
Agricultural Sciences Department Certificate 60112
This certificate program 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. 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 30 Ornamental Plants – Trees and Woody Shrubs 3.0 CSU, UC
- AGOR 39 Turf Grass Production and Management 3.0 CSU
- AGOR 40 Sports Turf Management 3.0
- 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

Total Units 27.0

SurfCAM
Aircraft Maintenance Technology & Manufacturing Department Certificate 60925
This certificate is a direct path for manufacturing students 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.

Requirements for the Certificate

Required courses:
- MFG 11 Manufacturing Processes I 2.0 CSU
- MFG 39 SurfCAM I 2.0 CSU
- MFG 39B SurfCAM II 2.0 CSU
- MFG 85 Manual CNC (Computerized Numerical Control) Operations 2.0 CSU

Total Units 26.0

Telematics
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

Required courses:
- CISM 11 Computer Information Systems 3.5 CSU, UC
- CISM 11 Systems Analysis and Design 3.5 CSU, UC
- CISM 21 Client/Server Architecture 4.0

Total Units 27.0

Television Production
Art Department
Certificate 60602
Requirements for the Certificate

Required courses:
- R-TV 01 Introduction to Broadcasting 3.0 CSU
- R-TV 15 Broadcast Business Practices 3.0
- R-TV 16 Broadcast Career Preparation 3.0
- R-TV 19A Beginning Television Production 3.0 CSU
- R-TV 19B Advanced Television Production 3.0 CSU
- R-TV 88A Television/Film Seminar 1.0
- R-TV 88B Television/Film Internship 1.0

PLUS Select nine (9) units from:
- R-TV 16 Writing for Television/Film 3.0 CSU
- R-TV 20 Television News Production 3.0
- R-TV 21 Remote Television Production and Engineering 3.5
- R-TV 22 Electronic Graphics and Non-Linear Editing 3.0

Total Units 26.0

Recommended Electives:
- ANIM 115 Storyboarding
- R-TV 26 Legal Issues in Entertainment Law
- THR 17 Acting for Television

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.
Programs of Study Leading to a Certificate

Requirements for the Certificate
Required courses:

- ARTD 15A Drawing: Beginning 3.0 CSU, UC
- FASH 10 Clothing Fundamentals 3.0 CSU
- FASH 17 Textiles 3.0 CSU, UC
- FASH 61 History of Costume and Fashion 3.0 CSU
- THTR 9 Introduction to Theatre Arts 3.0 CSU, UC
- THTR 19 Theatrical Costuming 3.0 CSU, UC

PLUS
Select six (6) units from:

- ARTD 20 Design: Two Dimensional 3.0 CSU, UC
- THTR 14 Stagecraft 3.0 CSU, UC
- THTR 15 Play Rehearsal and Performance 2.0 CSU, UC
- THTR 16 Theatrical Make-Up 2.0 CSU, UC
- THTR 18 Technical Theater Practicum 1.0 CSU, UC

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
Required courses:

- AGOR 1 Horticultural Science 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 Landscape and Nursery Management 3.0 CSU
- AGOR 32 Soil Science and Management 3.0 CSU, UC
- AGOR 51 Tractor and Landscape Equipment Operations 3.0 CSU
- AGOR 53 Small Engine Repair I 3.0 CSU
- AGOR 75 Urban Arboriculture 3.0

Total Units 24.0

Water Technology
Air Conditioning, Welding & Water 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, Grade II, or Grade 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
Required courses:

- WATR 60 Introduction to Water Systems 3.0
- WATR 61 Water Treatment 3.0
- WATR 62 Water Distribution 3.0
- WATR 63 Cross Connection Control – Certified Tester 3.0
- WATR 64 Cross Connection Control – Certified Specialist 3.0
- WATR 65 Water Hydraulics and Instrumentation 3.0

Total Units 18.0

Web Page Design
Art Department Certificate 60618

This certificate program is designed to provide students with a combination of aesthetic design principles and the technical expertise necessary for employment as a Web page designer.

Requirements for the Certificate
Required courses:

- ANIM 175 Web Animation with Flash 3.0
- ARTC 60 Graphic Design: Lettering and Typography 3.0 CSU, UC
- ARTC 70 Computer Graphics: Introduction 3.0 CSU
- ARTC 74 Computer Graphics: Web Page Design 3.0 CSU
- ARTC 171 Computer Graphics 2: Layout and Design with QuarkXpress 3.0 CSU
- ARTD 20 Design: Two Dimensional 3.0 CSU, UC
- COMP 13 Using Web Page Software 4.0 CSU
- PHOT 10 Beginning Photography 3.0 CSU, UC

Total Units 25.0

Welding
Air Conditioning, Welding & Water Technologies Certificate 60919

This program is designed to prepare the student for employment in the broad 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 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.

Requirements for the Certificate
Required courses:

- WELD 40 Introduction to Welding 2.0 CSU
- WELD 70A Beginning Arc Welding 3.0
- WELD 70B Intermediate Arc Welding 3.0

Total Units 8.0

Note: Any higher level welding courses may be substituted for WELD 70A.

Recommended Electives:

- MFG 70 Technical Mathematics – Manufacturing Applications
- WELD 60 Print Reading and Computations for Welders
- WELD 70C Certification for Welders
Section 9  
Transferring to California Colleges and Universities
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 an educational advisor or counselor in the Student Services Center for information about transfer courses in their major. It is advised that the student visit the Advising Center 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 in the Advising Center or a counselor in the Counseling Center. 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 the Advising Center. All of the CSU and UC catalogs are available in the Advising 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.

### UNIVERSITY TRANSFER MAJOR OPTIONS

#### Liberal Arts
- Art
- Art History
- Classics
- Comparative Cultures
- Creative Studies
- Drama/Theater Arts
- English and Literature
- Foreign Languages and Literatures
- Humanities
- Liberal Studies
- Linguistics
- Medieval Studies
- Museum Studies
- Music
- Musicology
- Philosophy
- Religious Studies
- Renaissance Studies
- Rhetoric

#### Social Sciences
- Anthropology
- Behavioral Sciences
- Child Development
- Cultural Geography
- Economics
- Ethnic and Area Studies
- Asian Studies
- Chicana/Chicano 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
- Social Ecology
- Sociology
- Urban Studies
- Women’s Studies

#### 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
- Park Management
- Plant Biology
- Soil Sciences
- Wildlife Management

#### Applied Arts
- Architecture
- Art
- Design
- Graphic Arts

#### ENGINEERING & Computer Science
- Aeronautics
- Bio-engineering
- Chemical
- Civil
- Electrical/Electronic
- Environmental
- Food Engineering
- Industrial Engineering
- Materials Science
- Mechanical
- Nuclear
- Petroleum

#### COMPUTER SCIENCE/ENGINEERING
- Aeronautics
- Bio-engineering
- Chemical
- Civil
- Electrical/Electronic
- Environmental
- Food Engineering
- Industrial Engineering
- Materials Science
- Mechanical
- Nuclear
- Petroleum

#### 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
TRANSFERRING TO CALIFORNIA COLLEGES AND UNIVERSITIES

California State University

Lower Division Transfer Admission Requirements

Many campuses must restrict enrollment of lower division transfer students due to heavy enrollment pressure. California residents are eligible for 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., you 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.

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 2006-2007 California State University (CSU) undergraduate application.
CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS 2006-07

The requirements listed below are for the 2006-2007 academic year and are based upon information available at the time of catalog publication. Students may contact the Advising Center for most current information at (909) 594-5611, ext. 4293.

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.

Students beginning Fall 2006 must follow 2006-2007 CSU GE-Breadth requirements. Courses are approved for the academic year in which they were completed. Students may obtain a copy from the Advising Center or Counseling Center. For the most recent version of the CSU GE, come to the Advising Center located in Student Services, upper level.

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

A-3: Critical Thinking:
- ENGL 1C Critical Thinking and Writing
- ENGL 1CH Critical Thinking and Writing – Honors
- PHIL 3 Logic in Practice
- PHIL 3H Logic in Practice – Honors
- PHIL 8 Critical Thinking
- PHIL 9 Critical Thinking and Logical Writing
- PSYC 5 Psychology of Reasoning and Problem Solving

SPCH 20 Argumentation and Debate
SPCH 20H Argumentation and Debate – Honors

Area B

The Physical Universe & Life (9 units minimum):
Select one course from each group. Also, one lab (+) course must be included in one of the science groups.

B-1: Physical Science —
Select at least one course from the following list:
- ASTR 5 Introduction to Astronomy
- ASTR 7L Geology of the Solar System
- ASTR 8 Introduction to Stars, Galaxies, and the Universe
- +CHEM 10 Chemistry for Allied Health Majors
- +CHEM 20 Introductory Organic and Biochemistry
- +CHEM 40 Introduction to General Chemistry
- +CHEM 50 General Chemistry I
- +CHEM 50H General Chemistry I – Honors

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
- +AHIS 1 Understanding the Visual Arts, or
- ARTB 1 Understanding the Visual Arts
- +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
- +MICR 1 Principles of Microbiology
- +MICR 22 Microbiology
- PSYC 1B Biological Psychology

B-3: Lab Science
This requirement is met by taking ONE of the courses above indicated by a “+” sign. Lab must be a corresponding section to the lecture course taken.

B-4: Mathematics
Select at least one course from the following list:
- BUSC 17 Applied Business Statistics
- MATH 100 Survey of College Mathematics
- MATH 110 Elementary Statistics
- MATH 110H Elementary Statistics – 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 280 Calculus and Analytic Geometry
- MATH 285 Linear Algebra and Differential Equations
- PSYC 10 Statistics for the Behavioral Sciences

AHIS 1H Understanding the Visual Arts – Honors
AHIS 2 Topics in Visual Art and Culture
AHIS 2H Topics in Visual Art and Culture – Honors
AHIS 3 History of Women and Gender in Art
AHIS 3H History of Women and Gender in Art – Honors
AHIS 4 History of Western Art: Prehistoric Through Gothic
AHIS 4H History of Western Art: Prehistoric Through Gothic – Honors
AHIS 5 History of Western Art: Renaissance Through Modern
AHIS 5H History of Western Art: Renaissance Through Modern – Honors
AHIS 6 History of Modern Art
AHIS 6H History of Modern Art – Honors
AHIS 9 History of Asian Art
AHIS 11 History of African, Oceanic and Native American Art
AHIS 12 History of Pre-Columbian Art
AHIS 12H History of Pre-Columbian Art – Honors
ARTB 14 Basic Studio Arts
ARTD 15A Drawing: Beginning
ARTD 20 Design: Two Dimensional
ARTD 25A Painting: Beginning
ARTS 22 Design: Three Dimensional
ARTS 30A Ceramics: Beginning
ARTS 40A Sculpture: Beginning
DNT 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
MUS 12 History of Jazz
MUS 13 Introduction to Music Appreciation
MUS 13H Introduction to Music Appreciation – Honors
MUS 14A World Music
## CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS 2006-07

### Area D

#### Social, Political, and Economic Institutions and Behavior; Historical Background

Required Courses: Minimum 9 units with courses from at least two disciplines (D0 – D9):

- **D-0**: Sociology & Criminology
  - CHLD 1 Child, Family and Community
  - SOC 1 Sociology
  - SOC 1H Sociology – Honors
  - SOC 2 Sociology
  - SOC 2H Sociology – Honors
  - SOC 4 Introduction to Gerontology
  - SOC 14 Marriage and the Family
  - SOC 15 Child Development
  - SOC 20 Sociology of Ethnic Relations
  - SOC 20H Sociology of Ethnic Relations – Honors

- **D-1**: Anthropology & Archeology
  - ANTH 3 Archeology
  - ANTH 5 Principles of Cultural Anthropology
  - ANTH 22 General Cultural Anthropology
  - ANTH 30 The Native American

- **D-2**: Economics
  - AGAF 1 Food Production, Land Use and Politics – A Global Perspective
  - AGFR 20 Conservation of Natural Resources
  - BUSC 1AH Principles of Economics – Macroeconomics
  - BUSC 1BH Principles of Economics – Microeconomics
  - BUSC 18H Principles of Economics – Microeconomics – Honors

- **D-3**: History
  - HIST 3 History of the United States
  - HIST 3H History of World Civilization
  - HIST 4 History of World Civilization – Honors
  - HIST 4H History of World Civilization
  - HIST 5 History of the United States
  - HIST 7 History of the United States
  - HIST 7H History of the United States – Honors
  - HIST 7H History of the United States – Honors
  - HIST 8 History of the United States
  - HIST 8H History of the United States – Honors
  - HIST 9 History of Asia
  - HIST 9H History of Asia
  - HIST 10 History of Asia
  - HIST 10H History of Asia
  - HIST 11 History of Mexico
  - HIST 11H History of Mexico
  - HIST 30 History of the African American
  - HIST 31 History of the African American
  - HIST 32 History of the African American
  - HIST 35 History of Africa
  - HIST 36 History of Africa

- **D-4**: Gender Studies
  - PSYC 25 The Psychology of Women

- **D-5**: Geography
  - GEOG 2 Human Geography
  - GEOG 5 World Regional Geography
  - GEOG 8 The Urban World
  - GEOG 30 Geography of California

- **D-6**: History
  - HIST 1 History of the United States
  - 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 5 History of the United States
  - HIST 6 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 9 History of Asia
  - HIST 10 History of Asia
  - HIST 11 History of Mexico
  - HIST 12 History of Mexico
  - HIST 13 History of the African American
  - HIST 14 History of the African American
  - HIST 15 History of Africa
  - HIST 16 History of Africa

### Transferring to California Colleges and Universities

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 14B</td>
<td>American Folk Music</td>
</tr>
<tr>
<td>MUS 15</td>
<td>Rock Music History and Appreciation</td>
</tr>
<tr>
<td>PHOT 15</td>
<td>History of Photography</td>
</tr>
<tr>
<td>SPCH 4</td>
<td>Oral Interpretation of Literature</td>
</tr>
<tr>
<td>THTR 9</td>
<td>Introduction to Theatre Arts</td>
</tr>
<tr>
<td>THTR 10</td>
<td>History of Theatre Arts</td>
</tr>
<tr>
<td>THTR 11</td>
<td>Principles of Acting I</td>
</tr>
</tbody>
</table>

### Humanities

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 1</td>
<td>Elementary Chinese</td>
</tr>
<tr>
<td>CHIN 2</td>
<td>Elementary Chinese</td>
</tr>
<tr>
<td>CHIN 3</td>
<td>Intermediate Chinese</td>
</tr>
<tr>
<td>CHIN 4</td>
<td>Intermediate Chinese</td>
</tr>
<tr>
<td>ENGL 1B</td>
<td>English – Intro to Literary Types</td>
</tr>
<tr>
<td>ENGL 1BH</td>
<td>English – Intro to Literary Types – Honors</td>
</tr>
<tr>
<td>FRCH 1</td>
<td>Elementary French</td>
</tr>
<tr>
<td>FRCH 2</td>
<td>Elementary French</td>
</tr>
<tr>
<td>FRCH 3</td>
<td>Intermediate French</td>
</tr>
<tr>
<td>FRCH 4</td>
<td>Intermediate French</td>
</tr>
<tr>
<td>FRCH 5</td>
<td>Advanced French</td>
</tr>
<tr>
<td>GERM 1</td>
<td>Elementary German</td>
</tr>
<tr>
<td>GERM 2</td>
<td>Elementary German</td>
</tr>
<tr>
<td>GERM 3</td>
<td>Intermediate German</td>
</tr>
<tr>
<td>GERM 4</td>
<td>Intermediate German</td>
</tr>
<tr>
<td>*HIST 1</td>
<td>History of the United States</td>
</tr>
<tr>
<td>*HIST 3</td>
<td>History of World Civilization</td>
</tr>
<tr>
<td>*HIST 3H</td>
<td>History of World Civilization – Honors</td>
</tr>
<tr>
<td>*HIST 4</td>
<td>History of World Civilization</td>
</tr>
<tr>
<td>*HIST 4H</td>
<td>History of World Civilization</td>
</tr>
<tr>
<td>*HIST 7</td>
<td>History of the United States</td>
</tr>
<tr>
<td>*HIST 7H</td>
<td>History of the United States – Honors</td>
</tr>
<tr>
<td>*HIST 8</td>
<td>History of the United States</td>
</tr>
<tr>
<td>*HIST 8H</td>
<td>History of the United States – Honors</td>
</tr>
<tr>
<td>*HIST 9</td>
<td>History of Asia</td>
</tr>
<tr>
<td>*HIST 10</td>
<td>History of Asia</td>
</tr>
<tr>
<td>*HIST 11</td>
<td>History of Mexico</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>
<tr>
<td>*HIST 35</td>
<td>History of Africa</td>
</tr>
<tr>
<td>*HIST 36</td>
<td>Women in American History – Beyond the Stereotypes</td>
</tr>
<tr>
<td>*HIST 39</td>
<td>California History</td>
</tr>
<tr>
<td>*HIST 40</td>
<td>History of the Mexican American</td>
</tr>
<tr>
<td>HUMA 1</td>
<td>The Humanities</td>
</tr>
<tr>
<td>ITAL 1</td>
<td>Elementary Italian</td>
</tr>
<tr>
<td>ITAL 2</td>
<td>Continuing Elementary Italian</td>
</tr>
</tbody>
</table>

### Area D

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 3</td>
<td>Intermediate Italian</td>
</tr>
<tr>
<td>ITAL 4</td>
<td>Continuing Intermediate Italian</td>
</tr>
<tr>
<td>ITAL 5</td>
<td>Advanced Italian</td>
</tr>
<tr>
<td>ITAL 6</td>
<td>Continuing Advanced Italian</td>
</tr>
<tr>
<td>ITAL 60</td>
<td>Italian Culture Through Cinema</td>
</tr>
<tr>
<td>JAPN 1</td>
<td>Elementary Japanese</td>
</tr>
<tr>
<td>JAPN 2</td>
<td>Continuing Elementary Japanese</td>
</tr>
<tr>
<td>JAPN 3</td>
<td>Intermediate Japanese</td>
</tr>
<tr>
<td>JAPN 4</td>
<td>Continuing Intermediate Japanese</td>
</tr>
<tr>
<td>JAPN 5</td>
<td>Advanced Japanese</td>
</tr>
<tr>
<td>LIT 1</td>
<td>Early American Literature</td>
</tr>
<tr>
<td>LIT 2</td>
<td>Modern American Literature</td>
</tr>
<tr>
<td>LIT 6A</td>
<td>Survey of English Literature</td>
</tr>
<tr>
<td>LIT 6B</td>
<td>Survey of English Literature</td>
</tr>
<tr>
<td>LIT 11A</td>
<td>World Literature</td>
</tr>
<tr>
<td>LIT 11B</td>
<td>World Literature</td>
</tr>
<tr>
<td>LIT 14</td>
<td>Introduction to Modern Poetry</td>
</tr>
<tr>
<td>LIT 15</td>
<td>Introduction to Cinema</td>
</tr>
<tr>
<td>LIT 20</td>
<td>African 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 36</td>
<td>Introduction to Mythology</td>
</tr>
<tr>
<td>LIT 40</td>
<td>Children’s Literature</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>
</tr>
<tr>
<td>PHI 5</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHI 5H</td>
<td>Introduction to Philosophy – Honors</td>
</tr>
<tr>
<td>PHI 12H</td>
<td>Ethics – Honors</td>
</tr>
<tr>
<td>PHI 15</td>
<td>Major World Religions</td>
</tr>
<tr>
<td>PHI 15H</td>
<td>Major World Religions – Honors</td>
</tr>
<tr>
<td>PHI 20A</td>
<td>History of Western Philosophy</td>
</tr>
<tr>
<td>PHI 20B</td>
<td>History of Western Philosophy</td>
</tr>
<tr>
<td>SIGN 101</td>
<td>American Sign Language 1</td>
</tr>
<tr>
<td>SIGN 202</td>
<td>American Deaf Culture</td>
</tr>
<tr>
<td>SPAN 1</td>
<td>Elementary Spanish</td>
</tr>
<tr>
<td>SPAN 2</td>
<td>Continuing Elementary Spanish</td>
</tr>
<tr>
<td>SPAN 3</td>
<td>Intermediate Spanish</td>
</tr>
<tr>
<td>SPAN 3H</td>
<td>Intermediate Spanish – Honors</td>
</tr>
<tr>
<td>SPAN 4</td>
<td>Continuing Intermediate Spanish</td>
</tr>
<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>

### Attention

It is recommended that you use one of the options below as part of the 9 units required in Area D.

#### 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:

  **United States History:**
  - HIST 1
  - HIST 7H
  - HIST 8H
  - HIST 31
  - HIST 40
  - POLI 1
  - POLI 25

  **American Institutions:**
  - HIST 7
  - HIST 8
  - HIST 30
  - HIST 36
  - POLI 1H
  - POLI 35

The two courses from Option 1 or Option 2 may be used as part of the 9 units for AREA D.
### CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS 2006-07

**D-7: Interdisciplinary Social or Behavioral**
- *HIST 36* Women in American History – Beyond the Stereotypes
- *HIST 39* California History
- *HIST 40* History of the Mexican American

**D-8: Political Science, Government, and Legal Institutions**
- *CHLD 10* Child Growth and Development
- *CHLD 10H* Child Growth and Development – Honors
- *SPCH 7* Intercultural Communication
- *SPCH 26* Interpersonal Communication
- *SPCH 26H* Interpersonal Communication – Honors
- *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 19* Abnormal Psychology
- *PSYC 25* The Psychology of Women
- *PSYC 26* Psychology of Sexuality
- *PSYC 33* Psychology for Effective Living

### Lifelong Understanding & Self Development (3 units)
Select at least one course.
- *AD 3* Chemical Dependency: Intervention, Treatment and Recovery
- *BIOL 5* Contemporary Health Issues
- *BIOL 13* Human Reproduction, Development and Aging
- *BIOL 15* Human Sexuality
- *BIOL 15H* Human Sexuality – Honors
- *CHLD 10* Child Growth and Development
- *CHLD 10H* Child Growth and Development – Honors
- *COUN 5* Career/Life Planning
- *FCS 41* Life Management
- *LEAD 55* Exploring Leadership
- *NF 10* Nutrition for Personal Health and Wellness
- *NF 25* Essentials of Nutrition
- *NF 25H* Essentials of Nutrition – Honors
- *NF 28* Cultural and Ethnic Foods
- *PE 34* Fitness for Living
- *PSYC 14* Developmental Psychology

* *PSYC 25* The Psychology of Women
* *PSYC 26* Psychology of Sexuality
* *PSYC 33* Psychology for Effective Living

### 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 2006 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.
Transferring to California Colleges and Universities

The University of California

http://www.ucop.edu/pathways

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 the Advising Center or a counselor in the Counseling Center.

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 under the Eligibility in the Local Context (ELC) program — you are eligible to transfer if you have a "C" (2.0) average 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, earning a "C" or better in each required course, and have an overall "C" average 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 a grade point average of at least 2.4; and
   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; and
      - one transferable college course (3 semester or 4-5 quarter units) in mathematical concepts and quantitative reasoning; and
      - 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.
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.

Students beginning Fall 2006 must follow 2006-2007 IGETC requirements. Courses are approved for the IGETC by the originating campus. Students with Advanced Placement exams which are recognized as equivalent 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 not acceptable.

The requirements listed below must be completed in their entirety for full certification to the UC and CSU. Students may obtain a copy from the Advising Center or Counseling Center.

### Area 1: English Communication
- Select one course from each group:
  - Group A: English Composition
    - ENGL 1A Freshman Composition, or
    - ENGL 1AH Freshman Composition – Honors
  - Group B: Critical Thinking – Composition
    - ENGL 1C Critical Thinking and Writing, or
    - ENGL 1CH Critical Thinking and Writing – Honors
    - PHIL 8 Critical Thinking
    - PHIL 9 Critical Thinking and Logical Writing
    - PSYC 5 Psychology of Reasoning and Problem Solving
  - Group C: Oral Communication
    - SPCH 1A Public Speaking, or
    - SPCH 1AH Public Speaking – Honors

### Area 2: 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
    - ARTH 1 Understanding the Visual Arts
    - AHIS 1H Understanding the Visual Arts – Honors
    - AHIS 3 History of Women and Gender in Art
    - AHIS 3H History of Women and Gender in Art – Honors
    - AHIS 4 History of Western Art: Prehistoric through Gothic
    - AHIS 4H History of Western Art: Prehistoric through Gothic – Honors
    - AHIS 5 History of Western Art: Renaissance through Modern
    - AHIS 5H History of Western Art: Renaissance through Modern – Honors
    - AHIS 6 History of Modern Art
    - AHIS 6H History of Modern Art – Honors
    - AHIS 11 History of African, Oceanic, and Native American Art
    - AHIS 12 History of Pre-Columbian Art
    - AHIS 12H History of Pre-Columbian Art – Honors
    - DN-T 20 History and Appreciation of Dance
    - MUS 11A Music Literature Survey
    - MUS 11B Music Literature Survey
    - MUS 12 History of Jazz
    - MUS 13 Introduction to Music Appreciation
    - MUS 13H Introduction to Music Appreciation – Honors
    - MUS 14A World Music
    - 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
    - FRCH 3 Intermediate French
    - FRCH 4 Continuing Intermediate French
    - FRCH 5 Advanced French
    - FRCH 6 Continuing Advanced French
    - FRCH 60 French Culture through Cinema
    - GERM 3 Intermediate German
    - GERM 4 Intermediate German
    - HIST 1 History of the United States
    - 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 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 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
    - HIST 39 California History
    - HIST 40 History of the Mexican American
    - HUMA 1 The Humanities
    - 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 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 World Literature
    - LIT 11B World Literature
    - LIT 14 Introduction to Modern Poetry
    - LIT 15 Introduction to Cinema
    - LIT 20 African American Literature
    - LIT 25 Contemporary Mexican American Literature
    - LIT 33 Images of Women in Literature
    - LIT 35 Science Fiction and Fantasy Survey
    - LIT 36 Introduction to Mythology
    - LIT 46 The Bible as Literature: Old Testament
    - LIT 47 The Bible as Literature: New Testament
    - PHIL 3 Logic in Practice
    - PHIL 5 Introduction to Philosophy
    - PHIL 5H Introduction to Philosophy – Honors
    - PHIL 12 Ethics
    - PHIL 12H Ethics – Honors
    - PHIL 15 Major World Religions
    - PHIL 15H Major World Religions – Honors
    - PHIL 20A History of Western Philosophy
    - PHIL 20B History of Western Philosophy
    - SIGN 202 American Deaf Culture
    - SPAN 3 Intermediate Spanish
    - SPAN 3H Intermediate Spanish – Honors
    - SPAN 4 Continuing Intermediate Spanish
    - SPAN 5 Advanced Spanish
    - SPAN 6 Continuing Advanced Spanish
    - SPAN 25 Spanish Literature
Area 4
Social and Behavioral Sciences
Select three courses total from a minimum of two different subject areas:

- ANTH 3 Archaeology
- ANTH 5 Principles of Cultural Anthropology
- ANTH 22 General Cultural Anthropology
- 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
- GEOG 2 Human Geography
- GEOG 2H Human Geography – Honors
- GEOG 8 The Urban World
- GEOG 30 Geography of California
- *POLI 1 Political Science
- *POLI 1H Political Science – Honors
- POLI 5 Political Science Theory
- POLI 9 Introduction to International Relations
- *POLI 25 Politics of the Mexican American
- *POLI 35 African American Politics
- *POLI 25 Politics of the Mexican American

Biological Science:

- ANAT 10A Introductory Human Anatomy
- ANAT 10B Introductory Human Physiology
- ANAT 35 Human Anatomy
- ANAT 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 4 Biology for Majors
- BIOL 4H Biology for Majors – Honors
- BIOL 6 Humans and the Environment
- BIOL 6L Humans and the Environment Laboratory
- BIOL 8 Cell and Molecular Biology
- BIOL 20 Marine Biology
- BIOL 21 Marine Biology Laboratory
- MICR 1 Principles of Microbiology
- MICR 2 Microbiology
- PSYC 1B Biological Psychology
IGETC AFTER TRANSFER PARTIAL CERTIFICATION OF THE INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)

The IGETC provides a pattern of courses that fulfills 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.

If, for good cause, you are unable to complete one or two IGETC courses*, you may be eligible to complete IGETC after transferring (*). Typical situations which constitute good cause for not completing one or two IGETC courses are illness, unavailable or canceled classes, military service and unexpected hardships, such as family or employment problems, experienced in the final term before transfer.

You may petition only during the final semester before transferring. If your petition for partial certification of IGETC is approved, you will be able to complete IGETC in one of the following ways:
1. Take a certified IGETC course, in the area to be completed, at any California community college at a time that does not require concurrent enrollment, such as during summer session.
2. Complete the requirement at a California community college while concurrently enrolled at the UC or CSU. You will be subject to the UC or CSU campus rules regarding concurrent enrollment, so this option may not be available at your campus.
3. Take a comparable course at the UC or CSU campus to which you will be transferring. This option is at the discretion of each campus, so it may not be a choice available to you.

You will be expected to complete IGETC before the beginning of the second full year of enrollment at your UC or CSU campus. Check with your campus counselor/educational advisor after you transfer for more information, including which options are available and which UC or CSU courses may be comparable to the IGETC courses remaining to be completed.

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.

Although admission requirements vary and are listed in the catalogs of the various universities and colleges, students who transfer to independent colleges and universities are given credit for most, if not all, of their community college work.

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
- 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
- Mount St. Mary’s College
- National University
- New College of California
- 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 Art Institute
- San Francisco Conservatory of Music
- Santa Clara University
- Saybrook Graduate School and Research Center
- Scripps College
- Simpson College
- Southern California College of Optometry
- 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
- University of West Los Angeles
- Vanguard University of Southern California
- Western University of Health Sciences
- Westminster College
- Whittier College
- William Jessup University
- Woodbury University

For more information on California Independent Colleges and Universities see an educational advisor in the Advising Center or counselor in the Counseling Department. You may also obtain information from the aiccu.edu.

* Area 1, English Communication and Area 2, Mathematics must be completed prior to transferring. To petition for IGETC after transfer see an educational advisor in the Advising Center or a counselor in the Counseling Department.
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.

Prerequisite
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 DESCRIPTION LISTING

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJI</td>
<td>Administration of Justice: Law Enforcement</td>
<td>109</td>
</tr>
<tr>
<td>AERO</td>
<td>Aeronautics</td>
<td>109</td>
</tr>
<tr>
<td>AGAB</td>
<td>Agriculture: Agri-Business</td>
<td>110</td>
</tr>
<tr>
<td>AGHE</td>
<td>Agriculture: Animal Health Technology</td>
<td>110</td>
</tr>
<tr>
<td>AGAN</td>
<td>Agriculture: Animal Science-General</td>
<td>111</td>
</tr>
<tr>
<td>AGFR</td>
<td>Agriculture: Forestry, Conservation</td>
<td>111</td>
</tr>
<tr>
<td>AGAG</td>
<td>Agriculture: General Subjects</td>
<td>111</td>
</tr>
<tr>
<td>AGLI</td>
<td>Agriculture: Livestock Production</td>
<td>112</td>
</tr>
<tr>
<td>AGOR</td>
<td>Agriculture: Ornamental Horticulture</td>
<td>112</td>
</tr>
<tr>
<td>AGPE</td>
<td>Agriculture: Pet Science</td>
<td>115</td>
</tr>
<tr>
<td>AIRC</td>
<td>Air Conditioning and Refrigeration</td>
<td>115</td>
</tr>
<tr>
<td>AIRT</td>
<td>Air Traffic Control</td>
<td>116</td>
</tr>
<tr>
<td>AIRM</td>
<td>Aircraft Maintenance Technology</td>
<td>117</td>
</tr>
<tr>
<td>AD</td>
<td>Alcohol Drug Counseling</td>
<td>118</td>
</tr>
<tr>
<td>AMLA</td>
<td>American Language</td>
<td>119</td>
</tr>
<tr>
<td>ANAT</td>
<td>Anatomy &amp; Physiology</td>
<td>120</td>
</tr>
<tr>
<td>ANTH</td>
<td>Anthropology</td>
<td>120</td>
</tr>
<tr>
<td>ARTC</td>
<td>Art: Advertising Design Graphics</td>
<td>121</td>
</tr>
<tr>
<td>ARTB</td>
<td>Art: Basic Studio Arts</td>
<td>126</td>
</tr>
<tr>
<td>ARTD</td>
<td>Art: Three-Dimensional Studio Arts</td>
<td>126</td>
</tr>
<tr>
<td>ARTF</td>
<td>Art: Two-Dimensional Studio Arts</td>
<td>127</td>
</tr>
<tr>
<td>ASTR</td>
<td>Astronomy</td>
<td>128</td>
</tr>
<tr>
<td>BIOL</td>
<td>Biology</td>
<td>129</td>
</tr>
<tr>
<td>BION</td>
<td>Botany</td>
<td>130</td>
</tr>
<tr>
<td>BUSA</td>
<td>Business: Accounting</td>
<td>130</td>
</tr>
<tr>
<td>BUSC</td>
<td>Business: Economics</td>
<td>131</td>
</tr>
<tr>
<td>BUSL</td>
<td>Business: Law</td>
<td>131</td>
</tr>
<tr>
<td>BUSM</td>
<td>Business: Management</td>
<td>133</td>
</tr>
<tr>
<td>BUSO</td>
<td>Business: Office Technology</td>
<td>134</td>
</tr>
<tr>
<td>BUSR</td>
<td>Business: Real Estate</td>
<td>134</td>
</tr>
<tr>
<td>BUSS</td>
<td>Business: Sales, Merchandising &amp; Marketing</td>
<td>135</td>
</tr>
<tr>
<td>CHMT</td>
<td>Chemical Technology</td>
<td>136</td>
</tr>
<tr>
<td>CHEM</td>
<td>Chemistry</td>
<td>136</td>
</tr>
<tr>
<td>CHIL</td>
<td>Child Development</td>
<td>137</td>
</tr>
<tr>
<td>CHIN</td>
<td>Chinese</td>
<td>139</td>
</tr>
<tr>
<td>CNET</td>
<td>Computer and Networking Technology</td>
<td>139</td>
</tr>
<tr>
<td>COMP</td>
<td>Computer Applications</td>
<td>140</td>
</tr>
<tr>
<td>GRAP</td>
<td>Computer Graphics</td>
<td>141</td>
</tr>
<tr>
<td>CISX</td>
<td>Computer Information Systems: Auxiliary</td>
<td>142</td>
</tr>
<tr>
<td>CIOS</td>
<td>Computer Information Systems: Beginning</td>
<td>143</td>
</tr>
<tr>
<td>CIOD</td>
<td>Computer Information Systems: Database</td>
<td>143</td>
</tr>
<tr>
<td>CIOM</td>
<td>Computer Information Systems: Management</td>
<td>144</td>
</tr>
<tr>
<td>CISO</td>
<td>Computer Information Systems: Networking</td>
<td>144</td>
</tr>
<tr>
<td>CIOP</td>
<td>Computer Information Systems: Programming</td>
<td>145</td>
</tr>
<tr>
<td>CIOT</td>
<td>Computer Information Systems: Security</td>
<td>147</td>
</tr>
<tr>
<td>CIOS</td>
<td>Computer Information Systems: Web Applications</td>
<td>146</td>
</tr>
<tr>
<td>CSCI</td>
<td>Computer Science</td>
<td>146</td>
</tr>
<tr>
<td>CORS</td>
<td>Correctional Sciences</td>
<td>147</td>
</tr>
<tr>
<td>COUN</td>
<td>Counseling</td>
<td>147</td>
</tr>
<tr>
<td>DNCE</td>
<td>Dance: Activity</td>
<td>152</td>
</tr>
<tr>
<td>DN-T</td>
<td>Dance: Theory</td>
<td>152</td>
</tr>
<tr>
<td>DSPS</td>
<td>Disabled Students</td>
<td>152</td>
</tr>
<tr>
<td>EDUC</td>
<td>Education</td>
<td>153</td>
</tr>
<tr>
<td>ELEC</td>
<td>Electronics</td>
<td>152</td>
</tr>
<tr>
<td>ECWT</td>
<td>Electronic Cabling and Wiring Technology</td>
<td>155</td>
</tr>
<tr>
<td>ELMA</td>
<td>Electronics Mathematics</td>
<td>155</td>
</tr>
<tr>
<td>FIRE</td>
<td>Fire Technology</td>
<td>161</td>
</tr>
<tr>
<td>FRCH</td>
<td>French</td>
<td>163</td>
</tr>
<tr>
<td>GEOG</td>
<td>Geography</td>
<td>164</td>
</tr>
<tr>
<td>GEOI</td>
<td>Geology</td>
<td>165</td>
</tr>
<tr>
<td>GERM</td>
<td>German</td>
<td>166</td>
</tr>
<tr>
<td>HIST</td>
<td>History</td>
<td>166</td>
</tr>
<tr>
<td>HT</td>
<td>Histotechnology</td>
<td>168</td>
</tr>
<tr>
<td>HRM</td>
<td>Hospitality and Restaurant Management</td>
<td>168</td>
</tr>
<tr>
<td>HUMA</td>
<td>Humanities</td>
<td>170</td>
</tr>
<tr>
<td>INSF</td>
<td>Inspection and Estimating, Building</td>
<td>170</td>
</tr>
<tr>
<td>ID</td>
<td>Interior Design</td>
<td>170</td>
</tr>
<tr>
<td>ITAL</td>
<td>Italian</td>
<td>171</td>
</tr>
<tr>
<td>JAPN</td>
<td>Japanese</td>
<td>172</td>
</tr>
<tr>
<td>JOUR</td>
<td>Journalism</td>
<td>172</td>
</tr>
<tr>
<td>LEAD</td>
<td>Leadership</td>
<td>174</td>
</tr>
<tr>
<td>LERN</td>
<td>Learning Assistance Services</td>
<td>174</td>
</tr>
<tr>
<td>LIBR</td>
<td>Library and Instructional Media</td>
<td>174</td>
</tr>
<tr>
<td>LIT</td>
<td>Literature</td>
<td>174</td>
</tr>
<tr>
<td>MFG</td>
<td>Manufacturing Technology</td>
<td>175</td>
</tr>
<tr>
<td>MATH</td>
<td>Mathematics</td>
<td>176</td>
</tr>
<tr>
<td>MEDI</td>
<td>Medical Terminology</td>
<td>179</td>
</tr>
<tr>
<td>MENT</td>
<td>Mental Health/Psychiatric Technician</td>
<td>179</td>
</tr>
<tr>
<td>METO</td>
<td>Meteorology</td>
<td>179</td>
</tr>
<tr>
<td>MICR</td>
<td>Microbiology</td>
<td>180</td>
</tr>
<tr>
<td>MUS</td>
<td>Music</td>
<td>180</td>
</tr>
<tr>
<td>NURS</td>
<td>Nursing</td>
<td>183</td>
</tr>
<tr>
<td>NF</td>
<td>Nutrition and Food</td>
<td>185</td>
</tr>
<tr>
<td>OCEA</td>
<td>Oceanography</td>
<td>185</td>
</tr>
<tr>
<td>PHIL</td>
<td>Philosophy</td>
<td>186</td>
</tr>
<tr>
<td>PHOT</td>
<td>Photographics</td>
<td>186</td>
</tr>
<tr>
<td>PE-L</td>
<td>Physical Education: Adaptive</td>
<td>187</td>
</tr>
<tr>
<td>PE-A</td>
<td>Physical Education: Aquatics</td>
<td>188</td>
</tr>
<tr>
<td>PE-X</td>
<td>Physical Education: Athletics</td>
<td>189</td>
</tr>
<tr>
<td>PE-F</td>
<td>Physical Education: Fitness</td>
<td>191</td>
</tr>
<tr>
<td>PE-I</td>
<td>Physical Education: Individual</td>
<td>193</td>
</tr>
<tr>
<td>PE-S</td>
<td>Physical Education: Team Sports</td>
<td>195</td>
</tr>
<tr>
<td>PE</td>
<td>Physical Education: Theory</td>
<td>197</td>
</tr>
<tr>
<td>PHSC</td>
<td>Physical Science</td>
<td>198</td>
</tr>
<tr>
<td>PHTH</td>
<td>Physical Therapy</td>
<td>198</td>
</tr>
<tr>
<td>PAP</td>
<td>Physician Assistant Preparatory</td>
<td>198</td>
</tr>
<tr>
<td>PHYS</td>
<td>Physics</td>
<td>199</td>
</tr>
<tr>
<td>POLI</td>
<td>Political Science</td>
<td>199</td>
</tr>
<tr>
<td>PSYC</td>
<td>Psychology</td>
<td>200</td>
</tr>
<tr>
<td>R-TV</td>
<td>Radio-Television</td>
<td>201</td>
</tr>
<tr>
<td>RAD</td>
<td>Radiologic Technology</td>
<td>203</td>
</tr>
<tr>
<td>READ</td>
<td>Reading</td>
<td>204</td>
</tr>
<tr>
<td>RESD</td>
<td>Respiratory Therapy</td>
<td>205</td>
</tr>
<tr>
<td>SL</td>
<td>Service Learning</td>
<td>205</td>
</tr>
<tr>
<td>SIGN</td>
<td>Sign Language, Interpreting</td>
<td>206</td>
</tr>
<tr>
<td>SOC</td>
<td>Sociology</td>
<td>207</td>
</tr>
<tr>
<td>SPAN</td>
<td>Spanish</td>
<td>208</td>
</tr>
<tr>
<td>SPEECH</td>
<td>Speech</td>
<td>208</td>
</tr>
<tr>
<td>STDEV</td>
<td>Study Techniques</td>
<td>210</td>
</tr>
<tr>
<td>STG</td>
<td>Student Government</td>
<td>210</td>
</tr>
<tr>
<td>SURV</td>
<td>Surveying</td>
<td>210</td>
</tr>
<tr>
<td>THTR</td>
<td>Theater Arts</td>
<td>210</td>
</tr>
<tr>
<td>TRAN</td>
<td>Transportation</td>
<td>211</td>
</tr>
<tr>
<td>TUTR</td>
<td>Tutor Training</td>
<td>211</td>
</tr>
<tr>
<td>WATR</td>
<td>Water Technology</td>
<td>211</td>
</tr>
<tr>
<td>WELD</td>
<td>Welding</td>
<td>212</td>
</tr>
</tbody>
</table>
Course Descriptions

AERONAUTICS

AERO 23 — Primary Pilot Ground School 4 Units
72 hours of lecture. Degree Appropriate, CSU
Basic aerodynamics, aircraft performance, Federal Aviation Regulations, aviation weather factors, and cross-country navigation procedures; introduces introductory material on radio navigation, aeromedical factors, and radio communications procedures. Meets the preparation requirements for the FAA Private Pilot computerized knowledge examination.

AERO 24 — Navigation 3 Units
54 hours of lecture. Degree Appropriate, CSU
Advisory: AERO 23
Basic dead reckoning navigation procedures. Aeronautical computers and their application in cross-country flying. Use of radio navigation aids, flightplanning, flight directors, global positioning system, and electronic flight instrumentation systems.

AERO 25 — Commercial Pilot Ground School 3 Units
54 hours of 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 hours of lecture. Degree Appropriate, CSU
A basic study of weather elements, the atmosphere, weather mechanics, weather disturbances, weather analysis and forecasts. Evaluates aviation weather reports and forecasts.

AERO 27 — Aviation Safety and Human Factors 3 Units
54 hours of lecture. Degree Appropriate, CSU
Advisory: AERO 23
Evaluation and analysis of factors which lead to preventable 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 hours of 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 hours of lecture. Degree Appropriate, CSU
Federal Aviation Regulations which pertain to pilot certification, aircraft maintenance, general operating rules; air traffic control practices and procedures; reporting of aircraft accidents.

AERO 30 — Instrument Ground School 3 Units
54 hours of lecture. Degree Appropriate, CSU
Advisory: AERO 23 and AERO 26 taken prior or concurrently
Instrument Flight Rules, Air Traffic Control and communications 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
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
18 hours of lecture.
Advisory: AERO 23 taken prior or concurrently
Flight training career preparation, including evaluation of locally available flight training options, university transfer preparation, and flight career options involving airline preparation, corporate aviation, charter operations, cargo airline careers, and military flight training. Students who repeat this course will improve skills through further instruction and practice.
Course Descriptions

AERO 40L — Flight Laboratory 1 Unit
(May be taken four times for credit.)
(May be taken for Credit/No Credit only.)
54 hours of lab.
Corequisite: AERO 40
Advisory: 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
(May be taken for Credit/No Credit only.)
Degree Appropriate
27 hours of lab.
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, 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 hours of 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 45B — Flight Instructor Ground School 3 Units
54 hours of lecture.
Non-Degree Credit
Advisory: AERO 25 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
(CAN AG 2)
54 hours of lecture.
Degree Appropriate, CSU, UC
Prerequisite: Formal admittance to Advanced Class Status in the Registered Veterinary Technology Program, and completion of MATH 51 or MATH 51B or AGAG91
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 54 — Veterinary Office Procedures 3 Units
54 hours of lecture.
Degree Appropriate
Includes veterinary hospital records, client relations, medical terminology, filing of governmental reports, legal responsibilities of animal health technicians and application of veterinary medical ethics.

AGHE 60 — Medical Nursing and Animal Care 4 Units
54 hours of lecture.
Degree Appropriate, CSU
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, electrocardiology, application of casts, splints and other appliances. Includes diseases, their causes and effects, and immunology of animals.

AGHE 61 — Surgical Nursing 4 Units
54 hours of lab.
Prerequisite: AGHE 60
Surgical preparation, surgical assistance, post-operative care, administration and monitor anesthesia, dentistry, CPR, sterilization and the maintenance of a sterile environment.

AGHE 62A — Clinical Pathology 4 Units
Fall Semester
54 hours of lecture.
54 hours of lab.
Prerequisite: AGLI 95
Introduces students to the expansive field of clinical pathology. Topics include hematology, clinical chemistries, internal parasites, immunology and serology.

AGHE 62B — Clinical Pathology 4 Units
Spring Semester
54 hours of lecture.
54 hours of lab.
Prerequisite: AGLI 95
Introduces students to the expansive field of clinical pathology. Topics include bacteriology, clinical chemistry, urinalysis, external parasites and cytology.

AGHE 64 — Veterinary Pharmacology 3 Units
54 hours of lecture.
Degree Appropriate, CSU
Prerequisite: Formal admittance to Advanced Class Status in 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 65 — Veterinary Radiography 2 Units
18 hours of lecture.
Degree Appropriate, CSU
54 hours of lab.
Prerequisite: AGLI 95 and formal admittance to the Registered Veterinary Technology Program
Basic concepts and skills of veterinary positioning of canine, feline, avian, reptilian species, and livestock for radiography; processing of the radiograph; radiation safety; basic technique and instrumentation; contrast radiography and ultrasound imaging. Emphasizes performance of x-ray procedures for the veterinary practitioner.

AGHE 79 — Laboratory Animal Medicine and Care 3 Units
36 hours of lecture.
Degree Appropriate, CSU
54 hours of lab.
Laboratory animal medicine, care and procedures, rules and regulations governing laboratory animals.

AGHE 83A — Work Experience in Animal Health 1 Unit
(May be taken four times for credit.)
Degree Appropriate
(May be taken for Credit/No Credit only.)
75 hours of lab.
Prerequisite: Formal admittance and enrollment in the Registered Veterinary Technology Program. Compliance with Work Experience regulations as designated in the College Catalog
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 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.

AGHE 83B — Work Experience in Animal Health 2 Units
(May be taken four times for credit.)
Degree Appropriate
(May be taken for Credit/No Credit only.)
150 hours of lab.
Prerequisite: Formal admittance and enrollment in the Registered Veterinary Technology Program. Compliance with Work Experience regulations as designated in the College Catalog.
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 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.

AGHE 84A — Applied Animal Health Procedures 1 Unit
Fall Semester
54 hours of lab.
Fall field study course in the collection, handling, and analysis of feces, urine, and blood samples of pet and domestic animals. Practical experience in applied clinical procedures and techniques, including treatments and minor surgical procedures with domestic farm animals. Experiences with animals will vary due to seasonal changes and different husbandry practices during fall and spring.

AGHE 84B — Applied Animal Health Procedures 1 Unit
Spring Semester
54 hours of lab.
Spring field study course in the collection, handling and analysis of feces, urine and blood samples of pet and domestic animals. Practical experience in applied clinical procedures and techniques, including treatments and minor surgical procedures with school domestic farm animals. Experiences with animals will vary due to seasonal changes and different husbandry practices during fall and spring.

AGHE 85 — Seminar in Registered Veterinary Technology 1 Unit
18 hours of lecture.
Degree Appropriate
Prerequisite: Completion of the Registered Veterinary Technology program or consent of instructor.
Group study course designed to help students with success on their national and state registration examinations. Course includes exposure to the types of questions encountered in registration examinations, question analysis strategies, and review of important anatomical, physiological, and nursing concepts.

AGAN 1 — Animal Science 3 Units
(CAN AG 6) 54 hours of lecture.
Fundamental problems and essential concepts of animal production. Includes the study of the types of domestic animals and their utilization by humans.

AGAN 2 — Animal Nutrition 3 Units
(CAN AG 12) 54 hours of lecture.
Composition of feeds and their utilization by domestic animals, including digestive physiology, animal assessment, feed appraisal and compiling of rations.

AGAN 51 — Animal Handling and Restraint 3 Units
36 hours of lecture.
54 hours of lab.
Methods of proper handling for large and small animals, including chemical and physical techniques of restraint.

AGAN 94 — Animal Breeding 3 Units
54 hours of lecture.
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.

AGFR 20 — Conservation of Natural Resources 3 Units
54 hours of lecture.
Degree Appropriate
Prerequisite: Eligibility for ENGL 68.
Concepts of conservation biology for natural resources, including biogeography, biodiversity and extinction, environmental law, and conservation organizations. Emphasis on temperate forest, tropical forest, desert, and grassland ecosystems.

AGAG 1 — Food Production, Land Use and Politics — A Global Perspective 3 Units
54 hours of lecture.
Degree Appropriate
Survey the world’s food producing systems in terms of economic, political and cultural forces. Emphasizes ethical, sustainable food producing agriculture.

AGAG 59 — Work Experience in Agriculture 1 Unit
(May be taken four times for credit.)
Degree Appropriate
(May be taken for Credit/No Credit only.)
225 hours of lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
This course is designated 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 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.

AGAG 60 — Work Experience in Agriculture 2 Units
(May be taken four times for credit.)
Degree Appropriate
(May be taken for Credit/No Credit only.)
150 hours of lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
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 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.

AGAG 61 — Work Experience in Agriculture 3 Units
(May be taken four times for credit.)
Degree Appropriate
(May be taken for Credit/No Credit only.)
225 hours of lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
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 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.

AGAG 62 — Work Experience in Agriculture 4 Units
(May be taken four times for credit.)
Degree Appropriate
(May be taken for Credit/No Credit only.)
300 hours of lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
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 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.

AGAG 91 — Agricultural Calculations 3 Units
54 hours of lecture.
Degree Appropriate
Prerequisite: Eligibility for MATH 51
Calculating the proper rates of application of veterinary drugs, fertilizers, irrigation water, farm chemicals and pesticidal materials. Practical field work in calibrating application equipment, plotting production rates and feed conversion, determining proper concentrations and dilutions and standardizing butterfat and solids non-fat.
Course Descriptions

**AGAG 99 — Special Projects in Agriculture** 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for Credit/No Credit only.) 54 hours of 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 repeating this course will make individual contracts of a more advanced nature with the instructor to insure that they have advanced in their studies.

**AGRI CULTURE: LIVESTOCK PRODUCTION**

**AGLI 12 — Exotic Animal Management** 3 Units
54 hours of lecture. Degree Appropriate, CSU
Care and management of exotic and alternative livestock species with emphasis on identification, health maintenance, handling techniques, nutrition and reproduction. Includes analysis of industry trends and principal marketing uses of exotic animals.

**AGLI 14 — Swine Production** 3 Units
(CAN AG 24) Degree Appropriate, CSU
36 hours of lecture.
54 hours of lab.
A study of the various types of swine enterprises and the ways and means of entering them. Swine management, including handling, feeding, breeding, farrowing, butchering, and marketing. Practical skills are taught using the college farm.

**AGLI 16 — Horse Production** 4 Units
(CAN AG 26) Degree Appropriate, CSU, UC
Fall Semester
54 hours of lecture.
54 hours of lab.
Selection, utilization, and management of the light horse emphasizing recreational aspects of the modern horse. Laboratory work includes experience in the care of horse and tack.

**AGLI 17 — Sheep Production** 3 Units
(CAN AG 22) Degree Appropriate, CSU
Spring Semester
36 hours of lecture.
54 hours of lab.
A study of the various types of sheep enterprises and the ways and means of entering them. Sheep management, sheep handling, feeding, shearing, breeding, lambing, and marketing. Practical skills are taught on the school farm and sheep farms in the area.

**AGLI 18 — Horse Ranch Management** 4 Units
54 hours of lecture. Degree Appropriate, CSU
54 hours of lab. Advisory: AGLI 16
Skills and knowledge to work on or manage a modern equine ranch, including management of the breeding farm, farm lay out, estrous cycles, breeding problems and stallion care.

**AGLI 19 — Horse Hoof Care** 2 Units
18 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Emphasizes proper horse hoof care; shoeing, trimming and disease recognition and control.

**AGLI 20 — Horse Behavior and Training** 2 Units
18 hours of lecture. Degree Appropriate, CSU
54 hours of lab. Corequisite: AGLI 16 or AGLI 18 (may have been taken previously) or equivalent experience with horses
Breaking and starting young horses. Concentrates on halter training of foals, ground work on yearlings, and green-breaking two-year-olds and up. Includes lunging techniques, driving, and breaking to a saddle. Training in collection, turning, backing, leads, and trailer loading.

**AGLI 30 — Beef Production** 3 Units
36 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Principles and practices in the selection and management of feeder, market, and breeding beef cattle. Economics of production, retail product, utilization of farm-grown feeds, and feedlot operation.

**AGLI 34 — Livestock Judging and Selection** 2 Units
18 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Study of form and appearance of farm animals as related to their function. Includes judging of breeding and terminal livestock as well as carcass evaluation.

**AGLI 95 — Anatomy of Domestic Animals** 4 Units
54 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Anatomy of domestic animals including body structures and systems, comparing domestic animals commonly found in the veterinary medical industry.

**AGLI 96 — Animal Sanitation and Disease Control** 3 Units
54 hours of lecture. Degree Appropriate, CSU
Prevention and control of infectious diseases affecting domestic animals, including basic disease concepts, transmission of infectious diseases, principles of sanitation and fundamentals of immunology.

**AGLI 97 — Artificial Insemination of Livestock** 2 Units
Spring Semester Degree Appropriate, CSU
18 hours of lecture.
54 hours of lab.
Theory and application of artificial insemination of domestic animals, including semen evaluation and processing, heat synchronization, and pregnancy diagnosis.

**AGLR 49A — Physiology of Domestic Animals** 2 Units
36 hours of lecture. Degree Appropriate
Prerequisite: AGLI 95
Physiology of domestic animals with emphasis on the function of internal organs and body systems. Designed for the second year Registered Veterinary Technology student in preparation for the state board examination.

**AGRICULTURE: ORNAMENTAL HORTICULTURE**

**AGOR 1 — Horticultural Science** 3 Units
(CAN AG 8) Degree Appropriate, CSU
54 hours of lecture.
The basic horticulture skills and techniques for use in gardening, nursery, and landscape applications. Emphasis on propagation, cultural practices, and the study of plant relationships, structure, growth and development.

**AGOR 2 — Plant Propagation/Greenhouse Management** 3 Units
(CAN AG 10) Degree Appropriate, CSU
36 hours of lecture.
54 hours of 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 sporing and division. Stresses greenhouses and other environmental structures for plant propagation and production.

**AGOR 4 — Park Management** 3 Units
Fall Semester Degree Appropriate, CSU
54 hours of lecture.
Management and operation of municipal park departments. Includes the development of budgets, purchasing, park policies, planning and scheduling.

**AGOR 5 — Park Facilities** 3 Units
Spring Semester Degree Appropriate, CSU
54 hours of lecture.
Management and operation of different types of park facilities. Includes the management of sports fields, recreation centers, campgrounds, aquatic facilities and golf courses.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 13</td>
<td>Landscape Design</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>AGOR 15</td>
<td>Interior Landscaping</td>
<td>3</td>
<td>Fall Semester Degree Appropriate&lt;br&gt;(May be taken for option of letter grade or Credit/No Credit.)&lt;br&gt;Design, installation and maintenance practices used in interior landscaping. Includes identification, culture and care of plants suitable for interior use.</td>
</tr>
<tr>
<td>AGOR 24</td>
<td>Integrated Pest Management</td>
<td>3</td>
<td>Identifies common agricultural pests in Southern California and analyzes physical, biological and chemical pest control principles and practices. Stress safety, equipment, laws, and regulations of pesticides.</td>
</tr>
<tr>
<td>AGOR 25</td>
<td>Floral Design I</td>
<td>3</td>
<td>36 hours of lecture. Degree Appropriate, CSU&lt;br&gt;Prerequisite: AGOR 25 or equivalent experience.&lt;br&gt;Continued application of principles in the art of floral design as to form, styles and composition. Designing of floral arrangements, wreaths, sprays, baskets, bouquets, wedding flowers and corsages are included in the laboratory.</td>
</tr>
<tr>
<td>AGOR 26</td>
<td>Floral Design II</td>
<td>3</td>
<td>36 hours of lecture. Degree Appropriate, CSU&lt;br&gt;Prerequisite: AGOR 25 and AGOR 26&lt;br&gt;Advanced application of principles in the art of holiday designs, party and wedding designs, and sympathy designs. Florist management operations will be emphasized. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AGOR 29</td>
<td>Ornamental Plants – Herbaceous</td>
<td>3</td>
<td>36 hours of lecture. Degree Appropriate, CSU, UC&lt;br&gt;(CAN AG 18) Identification, growth habits, culture and ornamental use of landscape annuals, biennials, perennials, ferns, indoor plants, ground covers and vines adapted to climates of California. Plants emphasized will come from the California Association of Nurserymen (CAN) and California Landscape Contractors Association (CLCA) certification test plant lists.</td>
</tr>
<tr>
<td>AGOR 30</td>
<td>Ornamental Plants – Trees and Woody Shrubs</td>
<td>3</td>
<td>36 hours of lecture. Degree Appropriate, CSU, UC&lt;br&gt;Prerequisite: AGOR 25 or equivalent experience.&lt;br&gt;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 Nurserymen (CAN) and California Landscape Contractors Association (CLCA) certification test plant lists.</td>
</tr>
<tr>
<td>AGOR 31</td>
<td>Landscaping and Nursery Management</td>
<td>3</td>
<td>Fall Semester Degree Appropriate, CSU&lt;br&gt;36 hours of lecture. Degree Appropriate, CSU&lt;br&gt;Prerequisite: AGOR 25 or equivalent experience.&lt;br&gt;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.</td>
</tr>
<tr>
<td>AGOR 32</td>
<td>Ornamental Plants – Trees and Woody Shrubs</td>
<td>3</td>
<td>Prerequisite: AGOR 25 or equivalent experience.&lt;br&gt;Continued application of principles in the art of floral design as to form, styles and composition. Designing of floral arrangements, wreaths, sprays, baskets, bouquets, wedding flowers and corsages are included in the laboratory.</td>
</tr>
<tr>
<td>AGOR 33</td>
<td>Turf Grass Production and Management</td>
<td>3</td>
<td>36 hours of lecture. Degree Appropriate, CSU&lt;br&gt;Prerequisite: AGOR 30 or equivalent experience.&lt;br&gt;Introduction to cultivation, maintenance and management of turfgrasses utilized for athletic fields, golf courses, parks, cemeteries, commercial and residential lawns. Identification, installation, cultural requirements and maintenance practices are emphasized.</td>
</tr>
<tr>
<td>AGOR 34</td>
<td>Sports Turf Management</td>
<td>3</td>
<td>Spring Semester Degree Appropriate&lt;br&gt;(May be taken for option of letter grade or Credit/No Credit.)&lt;br&gt;36 hours of lecture. Degree Appropriate, CSU&lt;br&gt;Prerequisite: AGOR 30 or equivalent experience.&lt;br&gt;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.</td>
</tr>
<tr>
<td>AGOR 40</td>
<td>Sports Turf Management</td>
<td>3</td>
<td>Prerequisite: AGOR 30 or equivalent experience.&lt;br&gt;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.</td>
</tr>
<tr>
<td>AGOR 50</td>
<td>Soil Science and Management</td>
<td>3</td>
<td>36 hours of lecture. Degree Appropriate, CSU, UC&lt;br&gt;(CAN AG 14) 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.</td>
</tr>
<tr>
<td>AGOR 51</td>
<td>Tractor and Landscape Equipment Operations</td>
<td>3</td>
<td>Fall Semester Degree Appropriate, CSU&lt;br&gt;Selection, operation, repair and maintenance of power equipment used in the landscape industry. Includes 2WD and 4WD tractors, skid loader, skid steer loader, backhoe, lawn mowers, edgers, weed eaters, blower/vacuum, rototillers, chainsaws, spraying equipment and all-terrain vehicles. Laboratory includes actual hands-on applications of this equipment.</td>
</tr>
<tr>
<td>AGOR 52</td>
<td>Hydraulics</td>
<td>3</td>
<td>Prerequisite: AGOR 30 or equivalent experience.&lt;br&gt;Introduction to cultivation, maintenance and management of turfgrasses utilized for athletic fields, golf courses, parks, cemeteries, commercial and residential lawns. Identification, installation, cultural requirements and maintenance practices are emphasized.</td>
</tr>
<tr>
<td>AGOR 53</td>
<td>Small Engine Repair I</td>
<td>3</td>
<td>Fall Semester Degree Appropriate, CSU&lt;br&gt;Prerequisite: AGOR 30 or equivalent experience.&lt;br&gt;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.</td>
</tr>
<tr>
<td>AGOR 54</td>
<td>Small Engine Repair II</td>
<td>3</td>
<td>Spring Semester Degree Appropriate, CSU&lt;br&gt;Prerequisite: AGOR 30 or equivalent experience.&lt;br&gt;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.</td>
</tr>
</tbody>
</table>
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOR 55</td>
<td>Diesel Engine Repair</td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>AGOR 56</td>
<td>Engine Diagnostics</td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>AGOR 57</td>
<td>Power Train Repair</td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AGOR 62</td>
<td>Landscape Irrigation – Design and Installation</td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>AGOR 63</td>
<td>Landscape Irrigation Systems Management</td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AGOR 64</td>
<td>Landscape Irrigation – Drip and Low Volume</td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AGOR 65</td>
<td>Landscape Irrigation – Drip and Low Volume</td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AGOR 66</td>
<td>Landscape Irrigation – Drip and Low Volume</td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AGOR 67</td>
<td>Landscape Hardscape Applications</td>
<td>3</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>AGOR 68</td>
<td>Landscaping Laws, Contracting, and Estimating</td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>AGOR 69</td>
<td>Urban Arboriculture</td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
</tbody>
</table>

Degree Appropriate, CSU
Agriculture: Pet Science

AGPE 71 — Canine Management 3 Units
Fall Semester Degree Appropriate
54 hours of lecture.
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, training and
grooming of dogs.

AGPE 72 — Feline Management 3 Units
Fall Semester Degree Appropriate
54 hours of lecture.
Advisory: Eligibility for ENGL 68
Care and management of cats. Includes breed identification
and characteristics, grooming, showing, nutrition, practical care, behavior,
and housing.

AGPE 73 — Tropical and Coldwater Fish Management 2 Units
Fall Semester Degree Appropriate
36 hours of 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 hours of 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 76 — Aviculture — Cage and Aviary Birds 3 Units
Spring Semester Degree Appropriate
54 hours of 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.

Air Conditioning & Refrigeration

AIRC 10 — Technical Mathematics in Air Conditioning and Refrigeration 2 Units
27 hours of lecture. Degree Appropriate
27 hours of 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 hours of lecture. Degree Appropriate
54 hours of 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 hours of 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 hours of lecture. Degree Appropriate
72 hours of 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 dehyration
techniques, and the safe handling and containment of refrigerants.

AIRC 25 — Electrical Fundamentals for Air Conditioning and Refrigeration 4 Units
54 hours of lecture. Degree Appropriate
54 hours of 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 troubleshooting.

AIRC 26A — Heat Pump Fundamentals 1.5 Units
27 hours of 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 hours of 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 gasses, gas combustion, furnace
construction, pilot proving devices and ignition systems.

AIRC 30 — Heat Load Calculations 3 Units
54 hours of 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 for Air Conditioning and Refrigeration 4 Units
54 hours of lecture. Degree Appropriate
54 hours of 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.

AIRC 32A — Air Properties and Measurement 1.5 Units
27 hours of lecture. Degree Appropriate
Advisory: AIRC 20, AIRC 30 taken prior
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.

AIRC 32B — Air Distribution Systems 1.5 Units
27 hours of lecture. Degree Appropriate
Advisory: AIRC 20, AIRC 30, AIRC 32A taken prior
Designed as a continuation of AIRC 32A and explores aircide equipment
and duct design applied to built-up and unitary air distribution systems.
COURSE DESCRIPTIONS

Prerequisite: Approval of college Work Experience supervisor and (May be taken for Credit/No Credit only.) (May be taken four times for credit.) Non-Degree Credit

AIRC 95 — Work Experience in Air Conditioning 1 Unit (May be taken four times for credit.) Non-Degree Credit 75 hours of lab.

AIRC 96 — Work Experience in Air Conditioning and Refrigeration (May be taken four times for credit.) Non-Degree Credit 300 hours of lab.

AIRC 97 — Work Experience in Air Conditioning and Refrigeration (May be taken four times for credit.) Non-Degree Credit 300 hours of lab.

AIRC 98 — Work Experience in Air Conditioning and Refrigeration (May be taken four times for credit.) Non-Degree Credit 300 hours of lab.

AIR TRAFFIC CONTROL

AIRT 41 — Aircraft Recognition and Performance 2 Units 36 hours of lecture. Degree Appropriate, CSU Advisory: AERO 23

AIRT 42 — Air Traffic Control Environment 3 Units Fall Semester Degree Appropriate, CSU 54 hours of lecture. Advisory: AIRT 42

AIRT 43 — Air Traffic Control Team Skills 1.5 Units Spring Semester Degree Appropriate, CSU 27 hours of lecture. Advisory: AIRT 42

AIRT 44 — Flight Services 3 Units 54 hours of lecture. Degree Appropriate, CSU Advisory: AIRT 43

AIRT 45 — Work Experience in Air Traffic Control 1 Unit (May be taken for Credit/No Credit only.) 18 hours of lab.

AIRT 46 — Work Experience in Air Traffic Control Laboratory 1 Unit 18 hours of lab.

AIRT 47 — Work Experience in Air Traffic Control 1 Unit (May be taken for Credit/No Credit only.) 18 hours of lab.

AIRT 48 — Work Experience in Air Traffic Control 1 Unit (May be taken for Credit/No Credit only.) 18 hours of lab.

AIRT 49 — Work Experience in Air Traffic Control 1 Unit (May be taken for Credit/No Credit only.) 18 hours of lab.

AIRT 50 — Work Experience in Air Traffic Control 1 Unit (May be taken for Credit/No Credit only.) 18 hours of lab.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRM 55</td>
<td>Terminal Radar Approach Control Laboratory</td>
<td>1 Unit</td>
<td>Simulation of a radar approach control facility concentrating on approach and departure procedures using appropriate phraseology, flight progress strip markings and radar separation standards. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRM 65A</td>
<td>Aircraft Powerplant Maintenance Technology</td>
<td>12 Units</td>
<td>Continuation of Aircraft Powerplant Maintenance Technology 65A, focusing on reciprocating engine systems and components. Approved by the FAA and required for the Airframe &amp; Aircraft Powerplant Maintenance Technology major.</td>
</tr>
<tr>
<td>AIRM 65B</td>
<td>Aircraft Powerplant Maintenance Technology</td>
<td>12 Units</td>
<td>Theory and maintenance of aircraft powerplant including systems and components. Approved by the FAA and required for the Airframe &amp; Aircraft Powerplant Maintenance Technology major.</td>
</tr>
<tr>
<td>AIRM 66A</td>
<td>Airframe Maintenance Technology</td>
<td>12 Units</td>
<td>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.</td>
</tr>
<tr>
<td>AIRM 66B</td>
<td>Airframe Maintenance Technology</td>
<td>12 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRM 70A</td>
<td>Aircraft Maintenance Electricity and Electronics</td>
<td>3 Units</td>
<td>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 &amp; Aircraft Powerplant Maintenance Technology major.</td>
</tr>
<tr>
<td>AIRM 70B</td>
<td>Aircraft Maintenance Electricity and Electronics</td>
<td>3 Units</td>
<td>Basic principles of alternating current, terminology, units and circuit arrangements, alternators, inverters and related controls, derating 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.</td>
</tr>
<tr>
<td>AIRM 71</td>
<td>Aviation Maintenance Science</td>
<td>6 Units</td>
<td>Federal aviation regulations, interpretation of aircraft drawings, basic physics, technical mathematics, and aircraft weight and balance. Approved course required of all aircraft powerplant and airframe maintenance technology majors.</td>
</tr>
<tr>
<td>AIRM 72</td>
<td>Aviation Materials and Processes</td>
<td>1.5 Units</td>
<td>Aviation materials, non-destructive testing, basic heat-treating and introduction to machine tool operation. Approved by the FAA and required for the Airframe &amp; Aircraft Powerplant Maintenance Technology major.</td>
</tr>
<tr>
<td>AIRM 73</td>
<td>Aviation Welding</td>
<td>1.5 Units</td>
<td>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.</td>
</tr>
<tr>
<td>AIRM 74</td>
<td>Aircraft Maintenance Technology – Work Experience</td>
<td>2 Units</td>
<td><strong>May be taken for Credit/No Credit only.</strong> 90 hours of lab. Prerequisite: AIRM 65A and AIRM 65B or AIRM 66A and AIRM 66B</td>
</tr>
<tr>
<td>AIRM 75</td>
<td>Aviation Flight and Flight Control</td>
<td>3 Units</td>
<td>Aircraft flight and flight control. Construction methods and procedures. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.</td>
</tr>
<tr>
<td>AIRM 75</td>
<td>Aviation Flight and Flight Control</td>
<td>3 Units</td>
<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>
</tr>
<tr>
<td>AIRM 81</td>
<td>Lab Studies in Aircraft Maintenance Technology</td>
<td>1 Unit</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRM 90A</td>
<td>Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRM 90B</td>
<td>Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRM 91A</td>
<td>Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>

### Course Descriptions (Continued)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRM 90A</td>
<td>Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRM 90B</td>
<td>Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRM 91A</td>
<td>Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>

### Course Descriptions (Final)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRM 90A</td>
<td>Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRM 90B</td>
<td>Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AIRM 91A</td>
<td>Airframe Maintenance Technology</td>
<td>3 Units</td>
<td>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. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
Course Descriptions

AIRM 91B — Airframe Maintenance Technology 3 Units
Fall Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
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.

AIRM 92A — Airframe Maintenance Technology 3 Units
Spring Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Aircraft hydraulic and pneumatic power systems, landing gear and wheel and brake systems. FAA approved. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.

AIRM 92B — Airframe Maintenance Technology 3 Units
Spring Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
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.

AIRM 93A — Airframe Maintenance Technology 3 Units
Fall Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Aircraft cabin heating and cooling, communication and navigation systems, and ice and rain control systems. Approved by the FAA and required for the Airframe & Aircraft Powerplant Maintenance Technology Major.

AIRM 93B — Airframe Maintenance Technology 3 Units
Fall Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
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.

AIRM 95A — Aircraft Powerplant Maintenance Technology 3 Units
Fall Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Piston powerplant theory. Calculations and construction. Approved by the FAA and required for the Airframe & Aircraft Powerplant Maintenance Technology Major.

AIRM 95B — Aircraft Powerplant Maintenance Technology 3 Units
Spring Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Piston engine overhaul, inspection, and troubleshooting procedures. Approved by the FAA and required for the Airframe & Aircraft Powerplant Maintenance Technology Major.

AIRM 96A — Aircraft Powerplant Maintenance Technology 3 Units
Fall Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Propeller 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.

AIRM 96B — Aircraft Powerplant Maintenance Technology 3 Units
Fall Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Instrumentation used in small and large aircraft engine indicating systems, including analog and digital equipment. Smoke and fire detection and suppression systems used on small and large aircraft. Includes engine starting systems and electrical power generating devices. Approved by the FAA and required for the Airframe & Aircraft Powerplant Maintenance Technology Major.

AIRM 97A — Aircraft Powerplant Maintenance Technology 3 Units
Fall Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Instrumentation used in small and large aircraft engine indicating systems, including analog and digital equipment. Smoke and fire detection and suppression systems used on small and large aircraft. Includes engine starting systems and electrical power generating devices. Approved by the FAA and required for the Airframe & Aircraft Powerplant Maintenance Technology Major.

AIRM 97B — Aircraft Powerplant Maintenance Technology 3 Units
Spring Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Reciprocating engine and turbine engine fuels, fuel metering devices, and system operation. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.

AIRM 98A — Aircraft Powerplant Maintenance Technology 3 Units
Fall Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Reciprocating and turbine engine ignition system theory and operation. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.

AIRM 98B — Aircraft Powerplant Maintenance Technology 3 Units
Spring Semester  
36 hours of lecture.  
72 hours of lab.  
Advisory: AIRM 70A, AIRM 70B, AIRM 71, AIRM 72, AIRM 73  
Reciprocating and turbine engine lubricants and lubricating systems. Approved by the FAA and required for the Airframe and Aircraft Powerplant Maintenance Technology major.

ALCOHOL DRUG COUNSELING

AD 1 — Alcohol/Drug Dependency 3 Units  
54 hours of lecture.  
Degree Appropriate, CSU  
Presents an overview of alcohol and chemical dependencies and their 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 familiarity with terms.

AD 2 — Physiological Effects of Alcohol/Drugs 3 Units  
54 hours of 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.

AD 3 — Chemical Dependency: Intervention, Treatment and Recovery 3 Units  
54 hours of 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 hours of lecture.  
Degree Appropriate, CSU  
Presents an overview of domestic violence and its ramifications. Examines the history, the law, the psychology of domestic violence, violence in families, the relationship of violence and chemical dependency, cultural and social aspects, breaking the cycle of violence, assessment/interventions, and resources in the community.

AD 5 — Chemical Dependency: Prevention and Education 1.5 Units  
27 hours of lecture.  
Degree Appropriate, CSU  
Reviews history, theories, models, and state of the art approaches to the prevention field. Examines identified risk factors, cultural/ethnic consideration, and community prevention strategies.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite/Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD 6</td>
<td>Dual Diagnosis</td>
<td>3 Units</td>
<td>Overview of the complex interactions of mental disorders and chemical dependency. Views and examines the key areas involving dual diagnosis: definition, diagnosis, treatment and aftermath.</td>
</tr>
<tr>
<td>AD 8</td>
<td>Group Process and Leadership</td>
<td>3 Units</td>
<td>Introduces the theory and practice of group therapy, the group process and dynamics of group interaction, and the functions of the counselor as facilitator. Emphasizes the group process as a method of change.</td>
</tr>
<tr>
<td>AD 9</td>
<td>Family Counseling</td>
<td>3 Units</td>
<td>Explores methods of assisting others who are significant in the lives of chemically dependent persons. Examines the ideas and dynamics of those relationships and develops strategies for the counselor. Participates in exercises leading to the development of counseling skills.</td>
</tr>
<tr>
<td>AD 10</td>
<td>Client Record and Documentation</td>
<td>1.5 Units</td>
<td>Presents a comprehensive overview of the components, areas of responsibilities, and methods of documentation in the patient/client's clinical record as required by federal, state, county, and private regulatory bodies. The course is designed to meet the training needs of persons who will be working in chemical dependency programs. Special emphasis is directed to the formulation and development of the written clinical treatment plan based on the written intake of psychosocial history.</td>
</tr>
<tr>
<td>AD 11</td>
<td>Techniques of Intervention and Referral</td>
<td>3 Units</td>
<td>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.</td>
</tr>
<tr>
<td>AD 13</td>
<td>Internship/Seminar</td>
<td>3.5 Units</td>
<td>Participates in exercises leading to the development of counseling skills.</td>
</tr>
<tr>
<td>AMLA 31R</td>
<td>American Language Basic Reading</td>
<td>4 Units</td>
<td>Basic reading and vocabulary for non-native speakers. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AMLA 32R</td>
<td>American Language Intermediate Reading</td>
<td>4 Units</td>
<td>Intermediate reading and vocabulary for non-native speakers. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AMLA 33R</td>
<td>American Language Advanced Reading</td>
<td>4 Units</td>
<td>Advanced reading and vocabulary for non-native speakers. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AMLA 41W</td>
<td>American Language Basic Writing</td>
<td>4 Units</td>
<td>Basic grammar and writing for non-native speakers. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AMLA 42W</td>
<td>American Language Intermediate Writing</td>
<td>4 Units</td>
<td>Intermediate grammar and writing for non-native speakers. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AMLA 43W</td>
<td>American Language Advanced Writing</td>
<td>4 Units</td>
<td>Advanced grammar and writing for non-native speakers. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AMLA 50</td>
<td>American Language Speaking</td>
<td>3 Units</td>
<td>Develops intermediate speaking and listening skills for non-native speakers. Concentration is on pronunciation. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>AMLA 53</td>
<td>American Language Speaking</td>
<td>3 Units</td>
<td>Develops advanced speaking and listening skills for non-native speakers. Concentrates on formal and informal communication.</td>
</tr>
<tr>
<td>AMLA 56</td>
<td>American Language Nouns and Articles</td>
<td>1 Unit</td>
<td>Concentrates on count and non-count nouns, article usage and other determiners for non-native learners of English. Writing practice and exercises will emphasize correct usage of these structures in writing and speaking. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

AMLA 61 — American Language Word Forms 1 Unit
(May be taken two times for credit.) Pre-Collegiate
(May be taken for option of letter grade or Credit/No Credit.)
18 hours of lecture.
Concentrates on verb tense, form, and use for non-native learners of
English. Practice in present, past, and future verb tense forms, meaning,
and use in both spoken and written English, with special emphasis on
writing for college courses. Students who repeat this course will
improve their skills through further instruction and practice.

AMLA 60 — American Language Verb Review I 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
Pre-Collegiate
18 hours of lecture.
Helps non-native speakers of English practice noun, verb, adjective and
adverb word forms in spoken and written English. Students who repeat this course
will improve their skills through further instruction and practice.

AMLA 59 — American Language Prepositions 1 Unit
(May be taken two times for credit.) Pre-Collegiate
(May be taken for option of letter grade or Credit/No Credit.)
18 hours of lecture.
Designed to help non-native learners of English practice their use of
prepositions in spoken and written English. Students will analyze
prepositions and idiomatic expressions through reading and will apply
their knowledge to written work. Students who repeat this course will
improve their skills through further instruction and practice.

AMLA 58 — American Language Verb Review II 1 Unit
(May be taken two times for credit.) Pre-Collegiate
(May be taken for option of letter grade or Credit/No Credit.)
18 hours of lecture.
Advanced work on modals, passive voice, passive modals, and conditionals
for non-native English students. Exercises and writing practice will
emphasize improved verb usage in writing. Students who repeat this course
will improve their skills through further instruction and practice.

AMLA 57 — American Language Verb Review III 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
Pre-Collegiate
18 hours of lecture.
An integrated study of the function of and interaction between the
skeletal, muscular, respiratory, circulatory, nervous, digestive, excretory
(including electrolyte and acid-base balance), endocrine, and
reproductive systems (including human genetics and embryology).

ANAT 10A — Introductory Human Anatomy 4 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
A systematic study of the macroscopic and microscopic structures of the
human body. Emphasis on cell structures, skeletal, muscular, respiratory, cir-
culatory, nervous, digestive, excretory, endocrine, and reproductive systems.

ANAT 10B — Introductory Human Physiology 4 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
54 hours of lab.
Prerequisite: ANAT 10A
An integrated study of the function of and interaction between the
skeletal, muscular, respiratory, circulatory, nervous, digestive, excretory
(including electrolyte and acid-base balance), endocrine, and
reproductive systems (including human genetics and embryology).

ANAT 35 — Human Anatomy 5 Units
(CAN BIOL10)
54 hours of lecture.
Degree Appropriate, CSU, UC
ANAT 35+36 = CAN BIOL SEQ B
108 hours of lab.
Structure of the organ systems at the gross, subgross, and microscopic
levels based on human material and dissection of the cat. Designed to
serve as an introduction to vertebrate embryology.

ANAT 36 — Human Physiology 5 Units
(CAN BIOL12)
54 hours of lecture.
Degree Appropriate, CSU, UC
ANAT 35+36 = CAN BIOL SEQ B
108 hours of lab.
Prerequisite: ANAT 35 and CHEM 10 or CHEM 40 or one year of high
school chemistry
Extensive study of human physiology at the cellular and molecular
levels covering muscular, nervous, circulatory, respiratory, renal,
digestive, endocrine, and reproductive systems. Includes regulation and
integration of organ systems where appropriate.

ANTE 1 — Biological Anthropology — Honors 3 Units
(CAN ANTH 2)
Degree Appropriate, CSU, UC
54 hours of 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 1 — Archaeology 3 Units
(CAN ANTH 6)
Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
An introduction to the aims, methods, and ethics of archaeological research
and their application to the archaeological record, in contrast to popular
depictions of archaeology. Topics include the evolution of culture from
the earliest stone toolmakers to the primary civilizations of the Old
and New Worlds, with emphasis on the invention and spread of agriculture
and the impact of this change on prehistoric cultures.

ANTH 2 — Principles of Cultural Anthropology 3 Units
(CAN ANTH 4)
Degree Appropriate, CSU, UC
54 hours of lecture.
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 3 — General Cultural Anthropology 3 Units
Degree Appropriate, CSU, UC
54 hours of lecture.
An introductory course to explore the nature of culture and how cultural
anthropologists study cultural phenomena such as: language,
personality, subsistence, economics, social and political organization,
migration, kinship systems, religion, the arts, and culture change. A
substantial amount of case material will be drawn from at least three
of the following: African Americans, indigenous peoples of the United
States, Asian Americans, Chicano/Latino Americans, and European
Americans. This course may meet the cultural diversity requirement at
transfer universities.
## Architectural Technology

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 10</td>
<td>Design I – Elements of Design</td>
<td>3</td>
<td>Fundamentals of two- and three-dimensional design and design process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Elements include visualization, perception, presentation, expression, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>site analysis of physical/contextual/cultural aspects of design and/or the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>urban environment. Portfolio will be produced.</td>
</tr>
<tr>
<td>ARCH 11</td>
<td>Architectural Drawing</td>
<td>3</td>
<td>Basic graphic and drawing techniques, including architectural graphics,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>building construction fundamentals, and methods of drawings considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>prerequisite to architectural design.</td>
</tr>
<tr>
<td>ARCH 12</td>
<td>Architectural Materials and Specifications</td>
<td>3</td>
<td>Application and development of construction materials. Formulation of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>materials specification used in architecture and the construction industry.</td>
</tr>
<tr>
<td>ARCH 13</td>
<td>Architectural Illustration</td>
<td>3</td>
<td>Application of methods and theory used in architectural design projects.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Includes graphic technique, design process, site analysis, presentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>drawings and construction principles. Portfolio will be produced.</td>
</tr>
<tr>
<td>ARCH 14</td>
<td>Building and Zoning Codes</td>
<td>3</td>
<td>Analysis and preparation of architectural presentation projects, including</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>schematic and final design, architectural models, oral presentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>techniques, board layouts using hand-drawn and computer-aided</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>techniques, and development of project portfolio.</td>
</tr>
<tr>
<td>ARCH 15</td>
<td>Architectural Working Drawings – I</td>
<td>3</td>
<td>Methods and techniques used in the development of architectural</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>construction documents for light frame structures (Type V construction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>including construction theory, practice, and working drawings. Portfolio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>will be produced.</td>
</tr>
<tr>
<td>ARCH 16</td>
<td>Basic CAD and Computer Application</td>
<td>4</td>
<td>Application of theory and principles of environmental design as applied</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>to architecture, landscape architecture, urban design, urban planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and (civil) engineering. Portfolio will be produced.</td>
</tr>
<tr>
<td>ARCH 17</td>
<td>Architectural Computer Aided Design Elements</td>
<td>3</td>
<td>Intermediate CAD (Computer Aided Design and Drafting) specifically for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>architectural design and production. Portfolio of 2-D drawings and 3-D CAD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>models will be produced. Students who repeat this course will improve skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>through further instruction and practice.</td>
</tr>
<tr>
<td>ARCH 18</td>
<td>Architectural CAD Working Drawings</td>
<td>3</td>
<td>Methods and techniques used in the development of architectural</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>construction documents for light frame structures (Type V construction)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>including construction theory, practice, and working drawings. Portfolio</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>will be produced.</td>
</tr>
<tr>
<td>ARCH 19</td>
<td>Design II – Architectural Design</td>
<td>3</td>
<td>Advanced architectural CAD drawings. Portfolio of working drawing and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>presentation applications of integrated 2-D and 3-D CAD models will be</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>produced. Students who repeat this course will improve skills through</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>further instruction and practice.</td>
</tr>
<tr>
<td>ARCH 20</td>
<td>Architectural CAD 3-D Illustration and Animation</td>
<td>3</td>
<td>Intermediate to advanced architectural CAD in 3-D illustration, rendering</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and animation. Virtual “walk-through” and “fly-through” of interior/</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>exterior 3-D models with photorealistic materials and lighting will be</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>produced. Students who repeat this course will improve skills through</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>further instruction and practice.</td>
</tr>
<tr>
<td>ARCH 21</td>
<td>Design IV – Advanced Project</td>
<td>3</td>
<td>Advanced design seminars and complex building design projects in</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>architecture, including portfolio development. Students who repeat this</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>ARCH 22</td>
<td>World Architecture</td>
<td>3</td>
<td>Development of architecture including ancient Egypt, Europe through the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Middle Ages, and classic civilizations of Asia and the Americas. Influence</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>of geography, religion, and socio-economic movements on architecture.</td>
</tr>
</tbody>
</table>
**Course Descriptions**

**ARCH 32 — World Architecture II**
3 Units
54 hours of lecture.
Degree Appropriate, CSU
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.)
75 hours of 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.)
150 hours of 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.

**ART HISTORY**

**AHIS 1 — Understanding the Visual Arts**
3 Units
Formerly ARTA
54 hours of lecture.
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
Formerly ARTA
54 hours of lecture.
Prerequisite: Acceptance into the Honors Program

**AHIS 2 — Topics in Visual Art and Culture**
3 Units
Formerly ARTA
54 hours of lecture.
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
Formerly ARTA
54 hours of lecture.
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. An honors course designed to provide an enriched experience. Students may not receive credit for both AHIS 2 (formerly ARTA 2) and AHIS 2H.

**AHIS 3 — History of Women and Gender in Art**
3 Units
Formerly ARTA
54 hours of lecture.
Advisory: Eligibility for ENGL 1A
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
Formerly ARTA
54 hours of lecture.
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.

**AHIS 4 — History of Western Art: Prehistoric Through Gothic**
3 Units
Formerly ARTA
54 hours of lecture.
Prerequisite: Eligibility for ENGL 68
An examination of Western art from the Prehistoric through Gothic periods, demonstrating the relationship of various visual art forms to each other and to the cultural context in which they were produced.

**AHIS 4H — History of Western Art: Prehistoric Through Gothic — Honors**
3 Units
Formerly ARTA
54 hours of lecture.
Prerequisite: Acceptance into the Honors Program
Examines 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.

**AHIS 5 — History of Western Art: Renaissance Through Modern**
3 Units
Formerly ARTA
54 hours of lecture.
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.

**AHIS 5H — History of Western Art: Renaissance Through Modern — Honors**
3 Units
Formerly ARTA
54 hours of lecture.
Prerequisite: Acceptance into the Honors Program
Examines 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.

**AHIS 6 — History of Modern Art**
3 Units
Formerly ARTA
54 hours of lecture.
Examines 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.

**AHIS 6H — History of Modern Art — Honors**
3 Units
Formerly ARTA
54 hours of lecture.
Prerequisite: Acceptance into the Honors Program
Examines 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.
AHIS 9 — History of Asian Art 3 Units  
Formerly ARTA  
Degree Appropriate, CSU, UC  
54 hours of lecture.  
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.  

AHIS 11 — History of African, Oceanic, and Native American Art 3 Units  
Formerly ARTA  
Degree Appropriate, CSU, UC  
54 hours of lecture.  
Advisory: Eligibility for ENGL 1A  
Examination of the traditional arts of African tribes and kingdoms, Oceania and Australia, and Native North America. Visual arts including painting, sculpture, architecture, body decoration, and ritual objects will be studied in their cultural contexts.  

AHIS 12 — History of Pre-Columbian Art 3 Units  
Formerly ARTA  
Degree Appropriate, CSU, UC  
Prerequisite: Acceptance into the Honors Program  
54 hours of lecture.  
The arts of Pre-Columbian Mesoamerica and Andean South America. Major monuments of sculpture, painting, architecture, ceramics and textiles from civilizations including the Maya, Aztecs, and Inca will be studied in their cultural contexts.  

AHIS 12H — History of Pre-Columbian Art – Honors 3 Units  
Formerly ARTA  
Degree Appropriate, CSU, UC  
Prerequisite: Acceptance into the Honors Program  
54 hours of lecture.  
54 hours of lecture.  
Advisory: Eligibility for ENGL 68  
Examination of the traditional arts of African tribes and kingdoms, Oceania and Australia, and Native North America. Visual arts including painting, sculpture, architecture, body decoration, and ritual objects will be studied in their cultural contexts.  

AHIS 99 — Special Projects in Art History 2 Units  
Formerly ARTA  
Degree Appropriate, CSU  
(May be taken four times for credit.)  
36 hours of lab.  
Advisory: AHIS 1 (formerly ARTA 1)  
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.  

ARTC 60 — Graphic Design: Lettering and Typography 3 Units  
Degree Appropriate, CSU, UC  
72 hours of lab.  
Prerequisite: 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.  

ARTC 66 — Portfolio 3 Units  
Degree Appropriate, CSU, UC  
54 hours of lecture.  
Prerequisite: 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.  

ARTC 70 — Computer Graphics: Introduction 3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
72 hours of lab.  
Prerequisite: ARTC 70  
Corequisite: ARTD 20 or ARTD 15A or ANIM 104 or ARTD 17A or ANIM 101  
72 hours of lab.  
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 72A — Computer Graphics: 2-Dimensional Animation 3 Units  
Degree Appropriate, CSU  
(May be taken two times for credit.)  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
72 hours of lab.  
Prerequisite: ARTC 70  
Explores methods of two-dimensional digital animation using a professional level animation application. Integration of cast members, script, score, behaviors, sound, and environments to create unique movies. Emphasis on design and animation principles synthesized with individual vision to create continuity and rhythm in animated sequences. Students who repeat this course will improve skills by further instruction and practice.  

ARTC 74 — Computer Graphics: Web Page Design 3 Units  
Degree Appropriate, CSU  
(May be taken two times for credit.)  
36 hours of lecture.  
72 hours of lab.  
Advisory: COMP 13 or COMP 14  
Professional design concepts applied to the basic elements of Web page design and construction including: text entry, editing and formatting, graphics and multimedia, tables, forms and frames. Students who repeat this course will improve skills through further instruction and practice.  

ARTC 77 — Computer Graphics: Illustration 3 Units  
Degree Appropriate, CSU  
(May be taken two times for credit.)  
36 hours of lecture.  
72 hours of lab.  
Prerequisite: ARTD 15A and ARTC 70 or ANIM 104  
Basic principles of art, design and color. Theory as applied to digital hand illustration will be explored and original illustrations created through use of professional illustration software. Students who repeat this course will improve skills by further instruction and practice.  

ARTC 78 — Computer Graphics: Animation 3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
72 hours of lab.  
Prerequisite: ARTC 60  
72 hours of lab.  
A professional level animation application. Integration of cast members, script, score, behaviors, sound, and environments to create unique movies. Emphasis on design and animation principles synthesized with individual vision to create continuity and rhythm in animated sequences. Students who repeat this course will improve skills by further instruction and practice.  

ARTC 79 — Computer Graphics: Vector Graphics 3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
72 hours of lab.  
Prerequisite: ARTC 60  
Corequisite: ARTD 20 or ARTD 15A or ANIM 104 or ARTD 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 printing, students advance to produce more complex illustrations. Students who repeat this course will improve skills through further instruction and practice.  

ARTC 165 — Illustration 3 Units  
Degree Appropriate, CSU  
(May be taken two times for credit.)  
36 hours of lecture.  
72 hours of lab.  
Corequisite: ARTD 20 or ARTD 15A or ANIM 104 or ARTD 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 printing, students advance to produce more complex illustrations. Students who repeat this course will improve skills through further instruction and practice.  

ARTD 105 — Design, Interior Design or Photographics 3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
72 hours of lab.  
Prerequisite: ARTD 101  
72 hours of lab.  
Prerequisite: ARTC 60  
Introductory course to concepts and methods in design, Interior Design or Photographics. Emphasis on design and animation principles synthesized with individual vision to create continuity and rhythm in animated sequences. Students who repeat this course will improve skills by further instruction and practice.  

ARTD 106 — Design, Interior Design or Photographics 3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
72 hours of lab.  
Prerequisite: ARTD 101  
72 hours of lab.  
Prerequisite: ARTC 60  
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.  

ARTD 176 — Advanced Design, Interior Design or Photographics 3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
72 hours of lab.  
Prerequisite: ARTD 175  
72 hours of lab.  
Prerequisite: ARTC 60  
Corequisite: ARTD 20 or ARTD 15A or ANIM 104 or ARTD 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 printing, students advance to produce more complex illustrations. Students who repeat this course will improve skills through further instruction and practice.  

ARTD 180 — Design, Interior Design or Photographics 3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
72 hours of lab.  
Prerequisite: ARTD 175  
72 hours of lab.  
Prerequisite: ARTC 60  
Corequisite: ARTD 20 or ARTD 15A or ANIM 104 or ARTD 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 printing, students advance to produce more complex illustrations. Students who repeat this course will improve skills through further instruction and practice.
**Course Descriptions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTC 171</td>
<td>Computer Graphics 2: Layout and Design</td>
<td>3</td>
<td>Visual mechanics of motion and gesture. Students who repeat this course will improve skills by further instruction and practice. (May be taken two times for credit.) Degree Appropriate, CSU 36 hours of lecture. 72 hours of lab. <strong>Prerequisite:</strong> ARTC 70</td>
</tr>
<tr>
<td>ANIM 105</td>
<td>Two and Three Dimensional Figure Studies</td>
<td>1</td>
<td>Development of perceptual and technical skills in two and three dimensional figure studies. Development of original drawings and sculptures based on human and animal forms and suitable as references for animation. Exploration of relationship of computer modeling to drawn and sculptured form. Students who repeat this course will improve skills by further instruction and practice. (May be taken four times for credit.) Degree Appropriate 12 hours of lecture. 24 hours of lab.</td>
</tr>
<tr>
<td>ANIM 102</td>
<td>Sculpture – Gesture</td>
<td>1</td>
<td>Emphasis on quick sculpting techniques capturing gesture and development of perceptual and technical skills for capturing basic motion of human and other figures. Explores in sculpture the basic three-dimensional mechanics of motion and gesture. Students who repeat this course will improve skills by further instruction and practice. (May be taken four times for credit.) Degree Appropriate 12 hours of lecture. 24 hours of lab.</td>
</tr>
<tr>
<td>ANIM 101</td>
<td>Drawing – Gesture and Figure</td>
<td>3</td>
<td>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 dimensional mechanics of motion and gesture. Students who repeat this course will improve skills by further instruction and practice. (May be taken two times for credit.) Degree Appropriate, CSU 36 hours of lecture. 72 hours of lab.</td>
</tr>
<tr>
<td>ANIM 107</td>
<td>Figure in Motion</td>
<td>3</td>
<td>Drawing human figures in motion. Anatomical landmarks, proportion, light and shadow, line composition, figure/ground relationships, the interaction of form and content, and the expressive potential of the human figure will be explored. Students who repeat this course will improve skills through further instruction and practice. (May be taken four times for credit.) Degree Appropriate 36 hours of lecture. 72 hours of lab. <strong>Prerequisite:</strong> ANIM 101</td>
</tr>
<tr>
<td>ANIM 106</td>
<td>Two and Three Dimensional Figure Studies</td>
<td>1</td>
<td>Development of perceptual and technical skills in two and three dimensional figure studies. Development of original drawings and sculptures based on human and animal forms and suitable as references for animation. Exploration of relationship of computer modeling to drawn and sculptured form. Students who repeat this course will improve skills by further instruction and practice. (May be taken four times for credit.) Degree Appropriate 12 hours of lecture. 24 hours of lab.</td>
</tr>
<tr>
<td>ANIM 108</td>
<td>Principles of Animation</td>
<td>3</td>
<td>Fundamental principles of traditional animation mechanics and observing details for the creation of solid, three-dimensional line drawings for animation. Studies effects of the animation environment on the background, characters, and objects in a scene. Students who repeat this course will improve skills through further instruction and practice. (May be taken four times for credit.) Degree Appropriate, CSU 36 hours of lecture. 72 hours of lab.</td>
</tr>
<tr>
<td>ANIM 109</td>
<td>Advanced Principles of Animation</td>
<td>3</td>
<td>Advanced principles of animation including mechanics of motion, weighted movement, lip sync and expression applied to story, staging, and character development. Focus will be on the animated film process from script to storyboards, timing sheets, key posing, inbetweening and clean up through the completion of a final animation. Students who repeat this course will improve skills through further instruction and practice. (May be taken four times for credit.) Degree Appropriate 36 hours of lecture. 72 hours of lab. <strong>Prerequisite:</strong> ANIM 108</td>
</tr>
<tr>
<td>ANIM 110</td>
<td>Animal Drawing</td>
<td>1.5</td>
<td>Emphasis on the study of light logic and color as they pertain to the creation of atmosphere, mood and environments. Students who repeat this course will improve skills through further instruction and practice. (May be taken two times for credit.) Degree Appropriate 18 hours of lecture. 36 hours of lab. <strong>Prerequisite:</strong> ARTD 15A or ANIM 4 or ANIM 104</td>
</tr>
<tr>
<td>ANIM 103</td>
<td>Two and Three Dimensional Figure Studies</td>
<td>1</td>
<td>Development of perceptual and technical skills in two and three dimensional figure studies. Development of original drawings and sculptures based on human and animal forms and suitable as references for animation. Exploration of relationship of computer modeling to drawn and sculptured form. Students who repeat this course will improve skills by further instruction and practice. (May be taken for option of letter grade or Credit/No Credit.) 12 hours of lecture. 24 hours of lab.</td>
</tr>
<tr>
<td>ANIM 104</td>
<td>Drawing Fundamentals</td>
<td>3</td>
<td>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. (May be taken two times for credit.) Degree Appropriate, CSU 36 hours of lecture. 72 hours of lab.</td>
</tr>
</tbody>
</table>

(Continued)
ANIM 119 — Portfolio 1.5 Units
(May be taken four times for credit.) Degree Appropriate
18 hours of lecture.
36 hours of lab.
Advisory: ANIM 115 and ANIM 116
Production of a portfolio representative of student interest, strength and
skill for entry into animation fields, professional schools, or
baccalaureate institutions. Selection of work for a portfolio will be
determined by requirements of the animation specialty and institution
to which it is directed. Students who repeat this course will improve
their skills through further instruction and practice.

ANIM 120 — Script Development for Animation 3 Units
(May be taken four times for credit.) Degree Appropriate
54 hours of lecture.
Creative and problem solving processes as applied to story and script
development. Scripts screenplays, live action and animated films, and the
practical application of story adaptation to screenplay. Students who repeat
this course will improve skills through further instruction and practice.

ANIM 130 — Introduction to 3-D Computer Animation 3 Units
(May be taken four times for credit.) Degree Appropriate
36 hours of lecture.
72 hours of lab.
Explores 3-D computer animation interfaces, use of polygons,
perspective views, contouring, links, external processors for special
computer effects, and the Alias MAYA software. 3-D modeling,
rendering, and animation of primitive and complex poly-spline meshes
used in environments, and following a storyboard developed for scene
sequencing are included. Students who repeat this course will improve
skills through further instruction and practice.

ANIM 132 — Modeling, Texture Mapping and Lighting 3 Units
 Formerly ANIM 142 Degree Appropriate
(May be taken four times for credit.)
36 hours of lecture.
72 hours of lab.
Advisory: ANIM 130
Explores 3-D poly-spline modeling and texture mapping and rendering
for realistic perspective, reflections, transparency, and background and
environmental building using the Alias MAYA software. Includes camera
animation with stage and environmental scenes featuring fly-throughs
and colored lighting effects. Students who repeat this course will improve
skills through further instruction and practice.

ANIM 134 — Visual Effects I: Dynamics 1.5 Units
(May be taken four times for credit.) Degree Appropriate
18 hours of lecture.
36 hours of lab.
Advisory: ANIM 132 or 142
Advanced course exploring the animation techniques called dynamics.
Covers building material for 3-D objects using bitmaps to create texture
maps and using light effects in 3-D computer environments. Students
who repeat this course will improve skills through further instruction
and practice.

ANIM 135 — Visual Effects II: Particle Systems 1.5 Units
(May be taken four times for credit.) Degree Appropriate
18 hours of lecture.
36 hours of lab.
Advisory: ANIM 134
Advanced course in the creation of computer animated particle systems
that imitate the natural forces of nature, the physical forces of
the universe and plasma forces of combustion. Students who repeat
this course will improve skills through further instruction and practice.

ANIM 136 — Animation Environment Layout 3 Units
(May be taken four times for credit.) Degree Appropriate
36 hours of lecture.
72 hours of lab.
Advisory: ANIM 132 or ANIM 142
Create computer animated environmental layout of a story to be
animated. Students who repeat this course will improve skills through
further instruction and practice.

ANIM 137A — Work Experience in New Digital Media 1 Unit
(May be taken for Credit/No Credit only.) Degree Appropriate
36 hours of lecture.
72 hours of lab.
Advisory: ANIM 132 or ANIM 132
This course is designed to provide actual on-the-job experience in
Animation 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 per semester) is required for each one unit of credit. 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 for Credit/No Credit only.) Degree Appropriate
150 hours of lab.
Advisory: Completion of the first and second semester of the
Animation Program
This course is designed to provide actual on-the-job experience in
Animation 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.

ANIM 137C — Work Experience in New Digital Media 3 Units
(May be taken four times for credit.) Degree Appropriate
225 hours of lab.
Advisory: Completion of the first and second semester of the
Animation Program
This course is designed to provide actual on-the-job experience in
Animation 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 per semester) is required for each one unit of credit. Students who repeat this course will improve skills through
further instruction and practice.

ANIM 138 — Introduction to Digital Animation 3 Units
 Formerly ANIM 138 Degree Appropriate
(May be taken four times for credit.)
18 hours of lecture.
36 hours of lab.
Prerequisite: ANIM 130
Production of a demo-reel representative of 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 139 — Advanced 3-D Animation 3 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
36 hours of lecture.
72 hours of 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 140 — Demo-Reel 1.5 Units
 Formerly ANIM 138 Degree Appropriate
(May be taken for Credit/No Credit only.)
18 hours of lecture.
36 hours of lab.
Prerequisite: ANIM 130
Production of a demo-reel representative of 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 146 — Advanced 3-D Animation 3 Units
(May be taken four times for credit.) Degree Appropriate
36 hours of lecture.
72 hours of 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 147 — Motion Graphics with After Effects 3 Units
(May be taken four times for credit.) Degree Appropriate
36 hours of lecture.
72 hours of lab.
Advisory: ANIM 142 or ANIM 132
This course is designed to provide actual on-the-job experience in
Animation 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 per semester) is required for each one unit of credit. 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
36 hours of lecture.
72 hours of lab.
Prerequisite: ARTC 70
Course Descriptions

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/visual 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 hours of lecture.
72 hours of lab.
Prerequisite: ART 70
Basic principles and unique design considerations of animation for Webpage design 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: BASIC STUDIO ARTS

ARTB 1 — Understanding the Visual Arts 3 Units
54 hours of 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 ARTB 1 and AHIS 1.

ARTB 14 — Basic Studio Arts 3 Units
36 hours of lecture. Degree Appropriate, CSU, UC
72 hours of 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: GALLERY & PROFESSIONAL PRACTICES

ARTG 20 — Intro Exhibition Design and Professional Practice 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
36 hours of lecture.
72 hours of lab.
Provides knowledge and hands-on skills in exhibition design and installation to display an esthetically effective art exhibition. Students will be familiarized with the necessary practical knowledge used by an emerging artist; historical and contemporary terms, examination of cultural and universal symbology and application, issues, theories, movements, and media in the context of art exhibition productions. Students who repeat this course will improve skills through further instruction and practice.

ARTG 21A — Introduction to Exhibition Production 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
36 hours of lecture.
72 hours of lab.
Prerequisite: ARTG 20
Designed to familiarize all art majors and serious artists with the concepts and hands-on applications of curatorial practices, 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.

ARTG 21B — Intermediate Exhibition Production 3 Units
(May be taken two times for credit.) Degree Appropriate
36 hours of lecture.
72 hours of lab.
Prerequisite: ARTG 21A
Provides increasing responsibility in exhibition planning, research, and practice.

ARTG 22A — Exhibition Design and Art Gallery Operation 1 Unit
Work Experience
(May be taken two times for credit.) Degree Appropriate
75 hours of 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 22B — Exhibition Design and Art Gallery Operation 2 Units
Work Experience
(May be taken two times for credit.) Degree Appropriate
150 hours of 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.

ART: SPECIAL STUDIO ARTS

ARTZ 50 — Specialized Studio-Art Studies 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
18 hours of lecture.
36 hours of lab.
Prerequisite: Satisfactory completion of all courses within a given art emphasis
Extended studio experiences supplementary to those available in the courses within a given art emphasis and allows the student to pursue more advanced and complex studio projects and experiments. Emphasis is placed upon the development of an individual creative direction. Students repeating this course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced.

ART: THREE-DIMENSIONAL STUDIO ARTS

ARTS 22 — Design: Three-Dimensional 3 Units
(CAN ART 16) Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of lab.
Prerequisite: Eligibility for ENGL 68
Develops perception and enhances decision making within the three-dimensional world. Emphasis is placed on concept development and artistic expression utilizing principles and elements of three-dimensional design as well as practical experiments with various media.

ARTS 30A — Ceramics: Beginning 3 Units
(CAN ART 6) Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of lab.
Entry-course emphasizing creative expression through the exploration of ceramics techniques. Emphasis on the vocabulary, theory, and analysis of the elements and principles of ceramics form through projects and oral/written criticism.
ARTS 30B — Ceramics: Beginning 3 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.
72 hours of lab.
Prerequisite: ARTS 30A
Examines the problems of aesthetically integrating materials and design by means of advanced problems in the techniques of clay construction, glazing and firing.

ARTS 31A — Ceramics: Intermediate 3 Units
36 hours of lecture.
Degree Appropriate, CSU, UC
72 hours of lab.
Prerequisite: ARTS 30B
Examines the problems of aesthetically integrating materials and design by means of advanced problems in the techniques of clay construction, glazing and firing. Emphasis on firing procedures, stacking procedures and the variables of ceramic production.

ARTS 31B — Ceramics: Intermediate 3 Units
36 hours of lecture.
Degree Appropriate, CSU, UC
72 hours of lab.
Prerequisite: ARTS 31A
Examines the problems of aesthetically integrating materials and design by means of advanced problems in the technique of clay construction, glazing and firing. Emphasis on firing procedures, stacking procedures and the variables of ceramic production.

ARTS 32 — Ceramics: Hand Construction 3 Units
36 hours of lecture.
Degree Appropriate, CSU, UC
72 hours of lab.
Prerequisite: ARTS 30B
Basic methods of hand construction. Special projects in structural, architectural and sculptural form.

ARTS 40A — Sculpture: Beginning 3 Units
(CAN ART 12)
Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of lab.
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.

ARTS 40B — Sculpture: Beginning 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.
72 hours of lab.
Prerequisite: ARTS 40A
Advanced projects in subtractive, additive and manipulative approaches are explored. Students who repeat this course will improve skills by further instruction and practice.

ARTS 41A — Sculpture: Life 3 Units
Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of lab.
Modeling from the human figure with emphasis on composition, gesture, motion and human anatomy as it informs sculptural form. Development of perceptual and technical skills in clay modeling from the human figure.

ARTS 41B — Sculpture: Life 3 Units
(May be taken four times for credit.)
Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of lab.
Prerequisite: ARTS 41A
Sculptural study of the human figure with emphasis on composition and human anatomy. Advanced projects using materials and techniques suitable for the human form. Students who repeat this course will further develop perceptual skills in clay modeling from the human figure.

ARTS 42 — Sculpture: Mold Making 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of lab.
Construction and use of flexible and plaster molds. Students who repeat this course will improve skills by further instruction and practice.

ARTS 46 — Sculpture: Special Effects Makeup 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of lab.
Advisory: ARTS 41 and/or ARTS 42
Modeling, molding, casting and application of special effects makeup appliances and masks to the human figure. Emphasis on human anatomy as it informs sculptural form and specialized molding and casting techniques and materials. Students who repeat this course will improve skills by further instruction and practice.

ARTD 15A — Drawing: Beginning 3 Units
Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of 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 expressionistic styles.

ARTD 16 — Drawing: Perspective 3 Units
Spring Semester
Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of 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
(CAN ART 24)
Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of lab.
Prerequisite: ARTD 15A or ANIM 104
Explores both contemporary and traditional approaches to sketching/drawing the human figure. Anatomical landmarks and proportion, line, light and shadow, composition, negative and positive space, the interaction of form and content, and the expressive potential of the human figure with its psychological and emotional implications will be explored.

ARTD 17B — Drawing: Life 3 Units
Degree Appropriate, CSU, UC
72 hours of lab.
Prerequisite: ARTD 17A
Extends and expands the principles and techniques introduced in ARTD 17A. More emphasis is placed on personal interpretation and individual expression.

ARTD 18 — Design: Two Dimensional 3 Units
Degree Appropriate, CSU, UC
36 hours of lecture.
72 hours of lab.
Prerequisite: ARTD 17A
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.
## Course Descriptions

### ARTD 21 — Design: Color and Composition
3 Units
(CAN ART 22)  
Degree Appropriate, CSU, UC  
Spring Semester  
(May be taken two times for credit.)  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 20 or equivalency determined by a portfolio review

An intensive study in the use of color theory for a variety of applications, including painting. Students who repeat this course will improve skills through further instruction and practice.

### ARTD 22 — Drawing: Head and Hands
1.5 Units
(May be taken two times for credit.)  
Degree Appropriate, CSU, UC  
18 hours of lecture.  
36 hours of lab.  
**Prerequisite:** ARTD 15A or ANIM 104

An intensive study in the use of color theory for a variety of applications, including painting. Students who repeat this course will improve skills through further instruction and practice.

### ARTD 23A — Drawing: Head and Hands
3 Units
(May be taken two times for credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A or ANIM 104

### ARTD 24 — Drawing: Intermediate
3 Units
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 23A

### ARTD 25 — Painting: Beginning
3 Units
(CAN ART 10)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 20

### ARTD 26 — Painting: Intermediate
3 Units
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 25A

### ARTD 27 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 28 — Painting: Design
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 29 — Painting: Advanced
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### AST 27 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 30 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 31 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 32 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 33 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 34 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 35 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 36 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 37 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 38 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 39 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 40 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 41 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 42 — Painting: Watercolor
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 15A OR ARTD 20 OR ARTD 25A

### ARTD 43 — Printmaking: Silk-Screen and Intaglio
3 Units
(CAN ART 20)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 26A OR ARTD 26B

### ARTD 44 — Printmaking: Relief and Lithography
3 Units
(CAN ART 20)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 26A OR ARTD 26B

### ARTD 45 — Printmaking: Silk-Screening
3 Units
(May be taken for option of letter grade or Credit/No Credit.)  
Degree Appropriate, CSU, UC  
36 hours of lecture.  
72 hours of lab.  
**Prerequisite:** ARTD 26A OR ARTD 26B

### ASTR 5 — Introduction to Astronomy
3 Units
54 hours of lecture.  
Degree Appropriate, CSU, UC  
**Prerequisite:** Eligibility for ENGL 1A

A non-technical survey of the Universe. Fundamental concepts and facts of astronomy. Topics include the origin and evolution of planets, stars, and galaxies; comets, meteorites, nebula; results of space exploration and modern cosmology. Student may enroll in ASTR 5 and ASTR 5L to receive laboratory science credit. Field trips may be required.

### ASTR 5L — Astronomical Observing Laboratory
1 Unit
Formerly ASTR 6  
Degree Appropriate, CSU, UC  
54 hours of lab.  
Corequisite: ASTR 5 OR 7 OR 8 (May have been taken previously)

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 hours of lecture.  
Degree Appropriate, CSU

A study of the Earth-like planets, satellites, and meteorites, from a geological point of view. Surveys geological methods and their application to the study of cratering, 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 hours of lecture.  
Degree Appropriate, CSU

Introduction to astronomy with emphasis on the structure and evolution of stars, galaxies, and the universe. Field trips required.

### ASTR 90T — Topics in Astronomy
3 Units
(May be taken four times for credit.)  
Degree Appropriate, CSU  
54 hours of lecture.

Explores various topics of astronomy.

### ASTR 99 — Special Projects in Astronomy
2 Units
Spring Semester  
Degree Appropriate, CSU  
(May be taken four times for credit.)  
36 hours of 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. Student must have instructor’s authorization before enrolling in this class. Students who repeat this course will improve skills by further instruction and practice.
### BIOL 1 — General Biology 4 Units
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab. 
Prerequisite: Eligibility for ENGL 68
An introduction to the major principles and concepts of biology, 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 2 — Plant and Animal Biology 4 Units
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab. 
Prerequisite: BIOL 1 or BIOL 4; and MATH 71 or 2 years of high school algebra (C or better)
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 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab. 
Identification and ecological relationships of common local plants and animals. Emphasizes evolutionary relationships; ecology including animal behavior, communities, ecosystems, wilderness and wildlife preservation, and population dynamics. Techniques of collecting and preserving. Many laboratory meetings conducted off campus; most trips require walking/hiking. Includes one weekend or all day field trip.

### BIOL 4 — Biology for Majors 4 Units
(CAN BIOL 2) Degree Appropriate, CSU, UC
BIOL 4 + ZOOL 1 + BTNY 3 = BIOL SEQ A
54 hours of lecture. 54 hours of lab. 
18 hours of activity. 
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. Includes one hour discussion group per week.

### BIOL 4H — Biology for Majors — Honors 4 Units
(CAN BIOL 2) Degree Appropriate, CSU, UC
BIOL 4H + ZOOL 1 + BTNY 3 = CAN BIOL SEQ A
54 hours of lecture. 
72 hours of lab. 
Prerequisite: Acceptance into the Honors Program; CHEM 10 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
Explores 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 5 — Contemporary Health Issues 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Provides an overview of contemporary health issues known to affect the quality and longevity of life. Topics include: sexuality and reproduction, stress management, fitness and nutrition, substance use and abuse, and environmental quality. Emphasis is on prevention of illness and injuries. May satisfy the Health Education requirement for a California State Teaching Credential.

### BIOL 6 — Humans and the Environment 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Ecological concepts to aid understanding our environmental crisis and determining courses of action to correct the problem. Emphasis will be placed on specific problems of population, pollution, preservation of wildlife and wilderness, and open space. A historical appraisal of human attitudes toward the land and of the necessity of developing a new land ethic.

### BIOL 6L — Humans and the Environment Laboratory 2 Units
108 hours of lab. Degree Appropriate, CSU, UC
Corequisite: BIOL 6 (May be taken previously)
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 7 — Natural History of California 3 Units
Fall Semester Degree Appropriate, CSU
May be taken for option of letter grade or Credit/No Credit.
54 hours of 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 12A — Natural History of California 3 Units
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture. 54 hours of 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 12B — Natural History of California 3 Units
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture. 54 hours of 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 12A and GEOL 12A.

### BIOL 12 — Human Reproduction, Development and Aging 3 Units
54 hours of 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 13 — Human Reproduction, Development and Aging – Honors 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
A survey of the biological, behavioral, cultural and ethical aspects of human sexuality.

### BIOL 15 — Human Sexuality 3 Units
54 hours of 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 hours of 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 hours of 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 trips may be required.
## Course Descriptions

### BIOL 20 — Marine Biology 3 Units
54 hours of 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 hours of 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 99A — Special Projects in Biology 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
18 hours of 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.

### BIOL 99B — Special Projects in Biology 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
36 hours of 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.

### BOTANY

#### BTNY 3 — Plant Structures, Functions, and Diversity 5 Units
(CAN BIOL 6) Degree Appropriate, CSU, UC

Spring Semester

BIOL 4 + ZOOL 1 + BTNY 3 = CAN BIOL SEQ A

54 hours of lecture.
108 hours of lab.

Advisory: BIOL 1 or BIOL 4. Eligibility for ENGL 1A. Completion of one year of high school chemistry (C or better) or equivalent.

---

### BUSINESS: ACCOUNTING

#### BUSA 7 — Principles of Accounting — Financial 5 Units
90 hours of lecture. Degree Appropriate, CSU, UC

Prerequisite: BUSA 11 or eligibility for MATH 51

Advisory: Eligibility for ENGL 1A

Introduction to financial accounting required of all Business Administration and Accounting majors which provides the foundation for the study of managerial, cost, 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 8 — Principles of Accounting — Managerial 5 Units
90 hours of 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.

#### BUSA 11 — Fundamentals of Accounting 3 Units
54 hours of lecture. Degree Appropriate

Prerequisite: BUSA 68 or eligibility for MATH 50

Accounting vocabulary and theory, equations to solve word problems, percentages, simple and compound interest, payroll, business taxes, present value, investments, inventory, depreciation, financial statement analysis and ratios.

#### BUSA 21 — Cost Accounting 4 Units
72 hours of lecture. Degree Appropriate

18 hours of lab.

Prerequisite: BUSA 8

Practical and theoretical concepts of cost accounting. Includes variable and fixed costs, cost-volume-profit analysis, job order and process costing, activity-based costing, general and flexible budgeting, standard costs, product costing/pricing methods, cost allocation, inventory management, capital budgeting, and transfer pricing.

#### BUSA 52 — Intermediate Accounting 3 Units
54 hours of 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 hours of lecture. Degree Appropriate

54 hours of lab.

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 hours of 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 hours of 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 hours of lecture. Degree Appropriate

Prerequisite: Eligibility for BUSA 11

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.

#### BUSA 71 — Financial Planning 3 Units
54 hours of lecture. Degree Appropriate, CSU

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.
BUSA 72 — Bookkeeping – Accounting 5 Units
90 hours of 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 hours of 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 hours of 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
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
75 hours of lab.
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 skills through further instruction and practice.

BUSA 83 — Work Experience in Accounting 2 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
150 hours of lab.
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
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
225 hours of lab.
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 skills through further instruction and practice.

BUSA 85 — Work Experience in Accounting 4 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
300 hours of lab.
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 skills through further instruction and practice.

BUSINESS: ECONOMICS

BUSA 84 — Principles of Economics – Microeconomics 3 Units
(CAN ECON 4) Degree Appropriate, CSU, UC
Fall Semester
54 hours of lecture.
Prerequisite: BUSC 1A or BUSC 1AH
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.

BUSA 85 — Principles of Economics – Macroeconomics – 3 Units
Honors
(CAN ECON 4) Degree Appropriate, CSU, UC
Spring Semester
54 hours of lecture.
Prerequisite: BUSC 1A or BUSC 1AH
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.

BUSL 18 — Business Law 3 Units
(CAN BUS 8) Degree Appropriate, CSU, UC
Fall Semester
54 hours of lecture.
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.
Course Descriptions

**BUSL 18H — Business Law – Honors**
3 Units
(CAN BUS 8)
Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: Acceptance into the Honors Program
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. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both BUSL 18 and BUSL 18H.

**BUSL 19 — Advanced Business Law**
3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
Advisory: BUSL 18
Second semester principles of business law emphasizing commercial paper, agency, partnerships, corporations, bankruptcy, regulation of trade and real property.

**BUSL 20 — International Business Law**
3 Units
54 hours of lecture.
Degree Appropriate
Advisory: Eligibility for ENGL 68
A comparative approach to the study of the international legal environment for business. Cultural, political, economic and ethical issues are emphasized as well as traditional business law subjects such as sales, commercial paper, corporate law, agency, licensing, employment, crimes, trade regulation and technology transfers.

**BUSL 30 — Introduction to Paralegal/Legal**
3 Units
54 hours of 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.

**BUSL 31A — Legal Analysis and Writing**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 30 (May have been taken previously)
Use of a law library for legal research and references; reading and analyzing codes and statutes, preparation of case briefs and research reports.

**BUSL 31B — Advanced Legal Analysis and Writing**
3 Units
54 hours of lecture.
Degree Appropriate
Prerequisite: BUSL 30 and BUSL 31A
Preparation of research memoranda, trial briefs, appellate briefs and other paralegal documents. Continuation of BUSL 31A, Legal Analysis and Writing.

**BUSL 32B — Civil Procedure-Trial and Post-Trial**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 33A
Preparing for litigation. Includes discovery, preparation of law and motion documents, remedies, summary judgments, motions to dismiss, settlements, and arbitration.

**BUSL 33A — Civil Procedure Pretrial**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 30 (May have been taken previously)
Analysis of the pre-trial procedural steps to litigating a cause of action. Examines the concepts of jurisdiction, venue, parties to the action, summons, default judgments, and pleadings.

**BUSL 33B — Civil Procedure Pretrial**
3 Units
Prerequisite: BUSL 33A
Preparation for litigation. Includes discovery, preparation of law and motion documents, remedies, summary judgments, motions to dismiss, settlements, and arbitration.

**BUSL 33A — Law Office Procedures**
3 Units
54 hours of lecture.
Degree Appropriate
Advisory: BUSL 30
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.

**BUSL 35B — Automated Law Office Procedures**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 35A
Prerequisite: BUSL 30 (May have been taken previously)
Examines procedures utilized by a paralegal in a law office. Includes the drafting of pleadings, legal research, document control, preparation of billing, law office and case load management, and tax reports.

**BUSL 35A — Law Office Procedures**
3 Units
54 hours of lecture.
Degree Appropriate
Advisory: BUSL 30
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.

**BUSL 36 — Paralegal Internship**
1 Unit
(May be taken two times for credit.)
(May be taken for Credit/No Credit only.)
90 hours of lab.
Corequisite: BUSL 31A, BUSL 33A, and BUSL 35A
Corequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39
(May have been taken previously)
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.

**BUSL 37 — Tort Law**
3 Units
54 hours of lecture.
Degree Appropriate
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.

**BUSL 38 — Employment and Ethical Issues in Paralegalism**
2 Units
36 hours of lecture.
Degree Appropriate
Prerequisite: BUSL 31A, BUSL 33A, BUSL 35A
Corequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
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; paralegal and attorney ethics.

**BUSL 39 — Contract Law**
3 Units
54 hours of lecture.
Degree Appropriate
Prerequisite: BUSL 31A, BUSL 33A, and BUSL 35A
Corequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
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; paralegal and attorney ethics.

**BUSL 40 — Landlord-Tenant Law**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 31A, BUSL 33A, BUSL 35A
Prerequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
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.

**BUSL 41 — Property Law**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 31A, BUSL 33A, BUSL 35A
Prerequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
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.

**BUSL 42 — Family Law**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 31A, BUSL 33A, BUSL 35A
Prerequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
Corequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
Laws relating to marriage, dissolution, nullity, and legal separation. Includes topics of community property, child custody, child support, spousal support, and prenuptial/anteunuptial agreements.

**BUSL 43 — Wills and Trusts**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 31A, BUSL 33A, BUSL 35A
Prerequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
Fundamental principles of the laws of wills and trusts, organization and jurisdiction of the California Probate Courts, estate planning and estate taxes.

**BUSL 44 — Bankruptcy Law**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 31A, BUSL 33A, BUSL 35A
Prerequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
Creation, scope, and administrative function of federal bankruptcy proceedings and arrangements. Includes wage earner plans and insolvency proceedings.

**BUSL 45 — Creditors' Rights**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 31A, BUSL 33A, BUSL 35A
Prerequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
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; paralegal and attorney ethics.

**BUSL 46 — Tax Law**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 31A, BUSL 33A, BUSL 35A
Prerequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
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; paralegal and attorney ethics.

**BUSL 47 — Corporate Law**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 31A, BUSL 33A, BUSL 35A
Prerequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
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; paralegal and attorney ethics.

**BUSL 48 — Securities Law**
3 Units
54 hours of lecture.
Degree Appropriate
Corequisite: BUSL 31A, BUSL 33A, BUSL 35A
Prerequisite: BUSL 31B, BUSL 33B, BUSL 35B, BUSL 37, BUSL 39 (May have been taken previously)
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; paralegal and attorney ethics.
<table>
<thead>
<tr>
<th>COURSE DESCRIPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUSL 47A — Litigation Procedures</strong> 3 Units</td>
</tr>
<tr>
<td>(May be taken two times for credit.) Degree Appropriate</td>
</tr>
<tr>
<td>54 hours of lecture.</td>
</tr>
<tr>
<td>Overview of litigation procedures. Description of a trial and trial presentations are emphasized. Students will prepare 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>
</tbody>
</table>

| **BUSL 47B — Litigation Practice** 1.5 Units |
| (May be taken two times for credit.) Degree Appropriate |
| 27 hours of lecture. |
| Corequisite: BUSL 47A (May have been taken previously) |
| A comparison of Litigation Procedures where students will present a case and evaluate the effectiveness of their presentation. Continuous revision of arguments based on presented opposing arguments will be emphasized. Students who repeat this course will improve skills through further instruction and practice. |

| **BUSL 48 — Criminal Law and Procedures** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| 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. |

| **BUSL 49 — Evidence Law** 3 Units |
| 54 hours of lecture. Degree Appropriate |
| Overview 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. |

| **BUSL 50 — Comparative Law** 3 Units |
| 54 hours of lecture. Degree Appropriate |
| Advisory: Eligibility for ENGL 1A |
| 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 American system. Ethical, language, substantive law, and procedural law are compared to illustrate and distinguish those systems from the American system.Ethical, language, substantive law, and procedural law are compared to illustrate and distinguish those systems from the American system. |

| **BUSL 51 — Principles of International Business** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| Advisory: Eligibility for ENGL 68 or BUSO 5 |
| 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. |

| **BUSL 52 — Principles of Exporting and Importing** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| Advisory: Eligibility for ENGL 68 or BUSO 5 |
| 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. |

| **BUSL 53 — Principles of Business** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| 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 54 — Principles of Comparative Law** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| 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 uses of the internet, consumer buying, retail and business purchases, Internet marketing, digital advertising, global E-commerce and business Web sites. |

| **BUSL 55 — Principles of World Culture: A Business Perspective** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| 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. World physical geography is surveyed, along with the cultural topics and demographics of each area. |

| **BUSL 56 — Principles of Human Resource Management** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| Advisory: Eligibility for ENGL 68 or BUSO 5 |
| 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 American system. Ethical, language, substantive law, and procedural law are compared to illustrate and distinguish those systems from the American system. |

| **BUSM 20 — Principles of Business** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| 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. |

| **BUSM 25 — Principles of E-Commerce** 3 Units |
| 54 hours of lecture. Degree Appropriate |
| 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 uses of the internet, consumer buying, retail and business purchases, Internet marketing, digital advertising, global E-commerce and business Web sites. |

| **BUSM 50 — World Culture: A Business Perspective** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| 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. World physical geography is surveyed, along with the cultural topics and demographics of each area. |

| **BUSM 51 — Principles of International Business** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| Advisory: Eligibility for ENGL 68 or BUSO 5 |
| 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. |

| **BUSM 52 — Principles of Exporting and Importing** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| Advisory: Eligibility for ENGL 68 or BUSO 5 |
| 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. |

| **BUSM 60 — Human Relations in Business** 3 Units |
| 54 hours of lecture. Degree Appropriate, CSU |
| Prerequisite: Eligibility for ENGL 68 or BUSO 5 |
| 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. |

| **BUSM 61 — Business Organization and Management** 3 Units |
| 54 hours of 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. |

| **BUSM 62 — Human Resource Management** 3 Units |
| 54 hours of lecture. Degree Appropriate |
| Prerequisite: Eligibility for ENGL 68 or BUSO 5 |
| 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 American system. Ethical, language, substantive law, and procedural law are compared to illustrate and distinguish those systems from the American system. |

| **BUSM 66 — Small Business Management** 3 Units |
| 54 hours of lecture. Degree Appropriate |
| Practical problems encountered in organizing and operating a small business enterprise. Included are units in initiating the business, financial and administrative control, legal and government relationships and other related considerations. |

| **BUSM 81 — Work Experience in Business** 1 Unit |
| (May be taken for Credit/No Credit only.) |
| 75 hours of 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. Students who repeat this course will improve skills through further instruction and practice. |
### BUSINESS: OFFICE TECHNOLOGY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Corequisites</th>
<th>Hours of Lecture</th>
<th>Degree Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSO 5</td>
<td>Business English</td>
<td>3</td>
<td>Eligibility for ENGL 68 or BUSO 5</td>
<td></td>
<td>54</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>BUSO 25</td>
<td>Business Communications</td>
<td>3</td>
<td>ENGL 1A</td>
<td></td>
<td>54</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>BUSO 96A</td>
<td>Business Vocabulary</td>
<td>1.5</td>
<td>Written communications including letters and memos</td>
<td></td>
<td>27</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>BUSO 98A</td>
<td>Office Professional Seminar</td>
<td>1</td>
<td>BUSO 1 and BUSO 5 and BUSO 65, plus COMP 12 or COMP 16</td>
<td>BUSO 98B</td>
<td>18</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>BUSO 98B</td>
<td>Office Professional Internship</td>
<td>1</td>
<td>Compliance with Work Experience regulations</td>
<td></td>
<td>75</td>
<td>Degree Appropriate</td>
</tr>
</tbody>
</table>

### BUSINESS: REAL ESTATE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Degree Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSR 51</td>
<td>Legal Aspects of Real Estate</td>
<td>3</td>
<td></td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>BUSR 52</td>
<td>Real Estate Practice</td>
<td>3</td>
<td></td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>BUSR 53</td>
<td>Real Estate Finance</td>
<td>3</td>
<td></td>
<td>Degree Appropriate</td>
</tr>
</tbody>
</table>

Provides the student with actual on-the-job experience in the office professional field which relates to student's classroom-based learning. Placements not guaranteed, but assistance is provided by Office Technology faculty. 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.

### BUSINESS: REAL ESTATE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisite</th>
<th>Degree Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSR 50</td>
<td>Real Estate Principles</td>
<td>3</td>
<td></td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>BUSR 51</td>
<td>Legal Aspects of Real Estate</td>
<td>3</td>
<td></td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>BUSR 52</td>
<td>Real Estate Practice</td>
<td>3</td>
<td></td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td>BUSR 53</td>
<td>Real Estate Finance</td>
<td>3</td>
<td></td>
<td>Degree Appropriate</td>
</tr>
</tbody>
</table>

Introduction to 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 (AWB) requirements for certified-residential/certified-general appraiser license. Also provides 30 hours toward office of real estate Appraisers (OREA) requirements for state licensing.
### Course Descriptions

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSR 54</td>
<td>Real Estate Appraisal</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate Introductory topics in real estate appraisal. Real estate appraisal course must be completed to take the Office of Real Estate Appraisers (OREA) exam. Can also be used to meet the additional education requirement for a sales or broker license.</td>
</tr>
<tr>
<td>BUSR 54SE</td>
<td>Standards, Ethics and Statistics for Professional Practice</td>
<td>1.5</td>
<td>27 hours of lecture. Degree Appropriate Prerequisite: BUSR 54 or employment in the real estate field. Meets 27 hours towards the license and certification requirements of the Office of Real Estate Appraisers (OREA). Emphasizes appraisal standards, professional ethics, application of statistics to real property valuation, and use of income and expense analysis to develop operating expense ratios.</td>
</tr>
<tr>
<td>BUSR 55</td>
<td>Real Estate Economics</td>
<td>3</td>
<td>54 hours of 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. Meets California real estate license requirements for salesperson and broker.</td>
</tr>
<tr>
<td>BUSR 56</td>
<td>Advanced Real Estate Appraisal</td>
<td>3</td>
<td>Spring Semester 54 hours of lecture. Degree Appropriate Prerequisite: BUSR 50 or employment in the real estate field. Appraisal of residential apartment buildings, small office buildings, shopping centers, and industrial buildings. Designed to meet 54 hours toward Office of Real Estate Appraisers (OREA) requirements for certificate-residential/certificate-general appraisal requirements. Meets California real estate broker license requirements.</td>
</tr>
<tr>
<td>BUSR 57</td>
<td>Income Tax Aspects of Real Estate Investments</td>
<td>3</td>
<td>54 hours of 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. Meets California real estate license requirements for broker.</td>
</tr>
<tr>
<td>BUSR 59</td>
<td>Real Estate Property Management</td>
<td>3</td>
<td>54 hours of 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.</td>
</tr>
<tr>
<td>BUSR 60</td>
<td>Real Estate Investment Planning</td>
<td>3</td>
<td>54 hours of 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.</td>
</tr>
<tr>
<td>BUSR 62</td>
<td>Mortgage Loan Broking and Lending</td>
<td>3</td>
<td>Fall Semester 54 hours of lecture. 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.</td>
</tr>
<tr>
<td>BUSR 66</td>
<td>General Appraiser Report Writing and Case Studies</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate Prerequisite: BUSR 50 or employment in the real estate appraisal field. Advisory: BUSR 56. Appraisal cases from all areas of real estate transactions with emphasis on cash flow estimates, measures of cash flow, internal rate of return, and discounted cash flow analysis for non-residential properties. Designed to meet 54 hours toward 2008 Appraiser Qualification Board (AWB) requirements for certified-residential/certified-general appraiser licensure. Also meets Office of Real Estate Appraisers (OREA) licensing requirements.</td>
</tr>
<tr>
<td>BUSR 67</td>
<td>Escrow Procedures I</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate 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; drawing of documents; and other processing details pertinent to handling escrows from inception to closing.</td>
</tr>
<tr>
<td>BUSR 68</td>
<td>Escrow Procedures II</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate Prerequisite: BUSR 76 and BUSA 68 or appropriate score on math placement test. Advanced escrow procedures covering the more unusual and difficult types of escrows and evaluating the possible solutions. Emphasis on practical processing of real estate sale and loan transactions with some personal property sales. Designed to assist those either directly or indirectly connected with the escrow industry.</td>
</tr>
<tr>
<td>BUSR 77</td>
<td>Escrow Procedures III</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate Prerequisite: BUSR 76 and BUSA 68 or appropriate score on math placement test. Advanced escrow procedures covering the more unusual and difficult types of escrows and evaluating the possible solutions. Emphasis on practical processing of real estate sale and loan transactions with some personal property sales. Designed to assist those either directly or indirectly connected with the escrow industry.</td>
</tr>
<tr>
<td>BUSS 33</td>
<td>Advertising and Promotion</td>
<td>3</td>
<td>54 hours of 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 BUSS 33 and FASH 63.</td>
</tr>
<tr>
<td>BUSS 35</td>
<td>Professional Selling</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Prerequisite: Eligibility for ENGL 68. 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>BUSS 36</td>
<td>Principles of Marketing</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Prerequisite: Eligibility for ENGL 68. 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>BUSS 50</td>
<td>Retail Store Management and Merchandising</td>
<td>3</td>
<td>54 hours of 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.</td>
</tr>
<tr>
<td>BUSS 70</td>
<td>International Marketing Concepts</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Prerequisite: BUSS 36. Factors unique to foreign economies, cultural environments, political/legal problems, marketing intelligence procedures, international product policy, distribution and market channels, promotion, and pricing decisions.</td>
</tr>
<tr>
<td>BUSS 79</td>
<td>Work Experience in Marketing Management</td>
<td>1</td>
<td>75 hours of lab. Prerequisite: BUSS 33 or BUSS 35 or BUS 36 or BUS 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>
</tbody>
</table>
Course Descriptions

BUSS 80 — Work Experience in Marketing Management 2 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
150 hours of 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.

BUSS 81 — Work Experience in Marketing Management 3 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
225 hours of 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.

BUSS 82 — Work Experience in Marketing Management 4 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
300 hours of 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.

BUSS 85 — Special Issues in Marketing 2 Units
Fall Semester Degree Appropriate
(May be taken two times for credit.)
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.
Prerequisite: BUSS 33 or BUSS 35 or BUSS 36 or BUSS 50

CHMT 9 — Work Experience in Chemical Technology 2 Units
54 hours of lecture.
Prerequisite: CHEM 50
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.

CHEMISTRY

CHEM 10 — Chemistry for Allied Health Majors 4 Units
(CAN CHEM 8) Degree Appropriate, CSU, UC
CHEM 10 + 20 = CAN CHEM SEQ B
54 hours of lecture.
72 hours of lab.
Prerequisite: MATH 51 or MATH 59 or one year of high school algebra (C or better)
Principles of inorganic chemistry including measurements, structure, nomenclature, reactions, radioactivity, energy, properties of matter, acids/bases and solutions. For Allied Health majors such as nursing, dental hygiene, radiation technology. Completion does not give eligibility for CHEM 50.

CHEM 20 — Introductory Organic and Biochemistry 5 Units
(CAN CHEM 8) Degree Appropriate, CSU, UC
CHEM 10 + 20 = CAN CHEM SEQ B
54 hours of lecture.
108 hours of lab.
Prerequisite: CHEM 10 or CHEM 40
Nomenclature, structure, function and reactions of major classes of organic compounds and of biomolecules, including amino acids, lipids, carbohydrates, nucleic acids and proteins. Structure and function of vitamins, coenzymes and enzymes. Metabolic pathways and biochemical energy.

CHEM 40 — Introduction to General Chemistry 4 Units
Degree Appropriate, CSU, UC
CHEM 10 + 20 = CAN CHEM SEQ B
54 hours of lecture.
72 hours of lab.
Prerequisite: MATH 51 or MATH 59 or one year of high school algebra (C or better)
Advisory: Eligibility for ENGL 1A
Introduction to measurements, structure and properties of matter, writing/balancing equations, stoichiometry, properties and behavior of gases, and properties of solutions. For science/engineering majors preparing for admission into General Chemistry (CHEM 50.)

CHEM 50 — General Chemistry I 5 Units
(CAN CHEM 2) Degree Appropriate, CSU, UC
CHEM 50 + 51 = CAN CHEM SEQ A
54 hours of lecture.
108 hours of lab.
Prerequisite: (1) One year high school chemistry with minimum “C” grade each semester; (2) Satisfactory score on Chemistry Placement Examination; (3) Grade of “C” or better in second-year algebra (may not be taken concurrently with CHEM 50.) Successful completion of CHEM 40 will satisfy the first and second prerequisites.
Topics in general chemistry such as scientific method, measurements, nomenclature, formulas and equations, reaction patterns, stoichiometry, thermodynamic processes, periodic trends, atomic structure, molecular bonding and geometry, properties of gases, liquids, solids and solutions. 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. Introduces techniques of scientific writing.

CHEM 50H — General Chemistry I — Honors 5 Units
54 hours of lecture. Degree Appropriate, CSU, UC
108 hours of lab.
Prerequisite: Acceptance into the Honors Program. Also, (1) one year high school chemistry with minimum “C” grade each semester; (2) satisfactory score on Chemistry Placement Test; (3) grade of “C” or better in second-year algebra (may not be taken concurrently with CHEM 40) will satisfy the first and second prerequisites.
Topics in general chemistry such as scientific method, measurements, nomenclature, formulas and equations, reaction patterns, stoichiometry, thermodynamic processes, periodic trends, atomic structure, molecular bonding and geometry, properties of gases, liquids, solids and solutions. 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. Introduces techniques of scientific writing. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both CHEM 50 and CHEM 50H.

CHEM 51 — General Chemistry II 5 Units
(CAN CHEM 4) 54 hours of lecture. Degree Appropriate, CSU, UC
CHEM 50 + 51 = CAN CHEM SEQ A
108 hours of lab.
Prerequisite: CHEM 50 or CHEM 50H
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. Laboratory experiments use computer and calculator-based technologies in data acquisition and analysis.

CHEM 58 — Essential Skills for Chemistry 1 Unit
18 hours of lecture.
Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
Designed for students who are apprehensive about and/or wish to improve their skills in General Chemistry. Includes development of a study plan, test strategies, preparing for the laboratory, data collection, graphical analysis and drawing conclusions.

CHEM 60 — Quantitative Chemical Analysis 5 Units
54 hours of lecture. Degree Appropriate, CSU, UC
108 hours of lab.
Prerequisite: CHEM 51
Techniques of gravimetric, volumetric and instrumental analysis. Precision in measurements, computations, accurate record keeping and report writing. General procedures, skills, methods, practices, philosophies, terminologies and ethics found in industrial, governmental and academic laboratories.

CHEM 75 — Instrumental Analysis 5 Units
54 hours of lecture. Degree Appropriate
108 hours of lab.
Prerequisite: CHEM 51
Introduction to a variety of instruments used in chemical industries. Includes theory, hands-on experience and basic maintenance of chemical instrumentation.

CHEM 80 — Organic Chemistry 5 Units
54 hours of lecture. Degree Appropriate, CSU, UC
108 hours of lab.
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 spectroscopic methods for organic compounds. To assure that all content material is covered, it is recommended that students complete the entire one-year sequence at one campus prior to transfer.

CHEM 81 — Organic Chemistry 5 Units
54 hours of lecture. Degree Appropriate, CSU, UC
108 hours of lab.
Prerequisite: CHEM 80
Continuation of CHEM 80. 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 spectroscopic methods. Structure, synthesis and representative reactions of carbohydrates, lipids and proteins.

CHEM 99 — Special Projects in Chemistry 2 Units
(May be taken two times for credit.) Degree Appropriate, CSU
36 hours of 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 class. Students repeating this course will make individual contracts of a more advanced nature to ensure that proficiencies are enhanced.

CHEM 10 — Child, Family and Community 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
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.

CHEM 10 — Principles/Practices in Child Development 3 Units
54 hours of lecture. Degree Appropriate, CSU
Overview of early child development programs: their histories, philosophies and emphasis; methods of guidance and discipline, licensing and regulations for state, federal and private programs. Reviews philosophies of educating young children, emphasizing developmentally appropriate practices, including the influence of culture and inclusive environments on the developing child. Explores career paths, professional growth, and ethics. Student assignments involve ten hours outside of class time observation and participation in children’s programs.

CHEM 10 — Survey of Child Development Curriculum 3 Units
54 hours of 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.

CHEM 10 — Child Growth and Development 3 Units
(CAN FCS 14) Degree Appropriate, CSU, UC
54 hours of lecture.
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.

CHEM 10 — Child Growth and Development – Honors 3 Units
54 hours of 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 CHEM 10 and CHEM 10H. TB test required.
### Course Descriptions

#### CHLD 50 — Multicultural Education: Anti-Bias Perspective 3 Units
54 hours of 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 hours of lecture. 
Degree Appropriate
Advisory: CHLD 61
Examines the developmental continuum of literacy from birth through early childhood. Considers cultural and linguistic diversity and applies 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 underlying the exploration of language and literacy acquisition. Issues of early literacy in public policy are reviewed.

#### CHLD 61 — Language Arts and Art Media for Young Children 3 Units
54 hours of lecture. 
Degree Appropriate
Language and literacy development of young children (0 to 6 years) is explored through developmentally appropriate activities, language study, games and play. Describes the role of creative art in the curriculum in relationship to the child's development and creativity. Emphasizes ways to develop an inclusive culturally and linguistically appropriate learning environment which encourages the child's use of senses and builds an awareness of aesthetic materials.

#### CHLD 62 — Music and Motor Development 3 Units for Young Children
54 hours of lecture. 
Degree Appropriate, CSU
Exploration of the role of music and movement in a child's development. Emphasizes students development in practical activities including making music, movement, singing and musical instruments.

#### CHLD 63 — Creative Science and Math for Young Children 3 Units
54 hours of lecture. 
Degree Appropriate
Advisory: Eligibility for ENGL 68
Exploration of children's thinking processes and problem solving abilities as they become aware of the physical world. Discussion, planning, and creating basic science and math experiences. Emphasizes creative aspects of math and science.

#### CHLD 64 — Health, Safety and Nutrition of Young Children 3 Units
54 hours of 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 65 — Early Childhood Development Observation 2 Units
36 hours of lecture. 
Degree Appropriate, CSU
Prerequisite: CHLD 5 and CHLD 10 or CHLD 10H
Corequisite: CHLD 66L (May have been taken previously)
Provides the student with an understanding of child development through observations in the laboratory school. The holistic approach to child study is emphasized. Students use information which they have recorded and relates to different areas of the preschool child's interaction with environment and with significant people.

#### CHLD 66 — Early Childhood Development Observation 1 Unit
54 hours of lab. 
Degree Appropriate, CSU
Corequisite: CHLD 66
Provides the student with an understanding of child development through observations in the laboratory school. The holistic approach to child study is emphasized. Students use information which they have recorded and relates to different areas of the preschool child's interaction with environment and with significant people.

#### CHLD 66L — Early Childhood Development Observation 1 Unit Laboratory
54 hours of lab. 
Degree Appropriate, CSU
Corequisite: CHLD 66
Provides the student with an understanding of child development through observations in the laboratory school. The holistic approach to child study is emphasized. Students use information which they have recorded and relates to different areas of the preschool child's interaction with environment and with significant people.

#### CHLD 67 — Early Childhood Development Participation 2 Units
36 hours of lecture. 
Degree Appropriate, CSU
Prerequisite: 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 1 Unit Laboratory
63 hours of lab. 
Degree Appropriate, CSU
Corequisite: CHLD 67
Teaching experiences in the preschool children's classroom related to creating environment, managing program, preparing materials, planning and carrying out activities for individual children and groups of children.

#### CHLD 68 — Children with Special Needs 3 Units
54 hours of lecture. 
Degree Appropriate, CSU
Prerequisite: 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 hours of lecture. 
Degree Appropriate
Prerequisite: 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 hours of lecture. 
Degree Appropriate
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.

#### CHLD 71B — Management/Marketing/Personnel for ECD Programs 3 Units
54 hours of 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 hours of lecture. 
Degree Appropriate
Prerequisite: CHLD 67, CHLD 67L
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 hours of lecture. 
Degree Appropriate, CSU
Advisory: CHLD 10 or CHLD 10H
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHLD 75</td>
<td>Supervising Adults in Early Childhood Settings</td>
<td>2</td>
<td>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.</td>
</tr>
<tr>
<td>CHLD 81</td>
<td>Current Curriculum Models in ECD</td>
<td>1</td>
<td>Provides students with a working knowledge of a specific curriculum model being used in preschools in the community. Origins, practices in the classroom, pros and cons of model and evaluation methods will be included. Model covered will change with course offerings.</td>
</tr>
<tr>
<td>CHLD 82</td>
<td>Advocacy in Early Childhood Development</td>
<td>1</td>
<td>Clarifies current issues in ECD on which teachers need to work with their administration and parents. Develops skills in advocacy for children. Students who repeat this course will improve skills by further instruction and practice.</td>
</tr>
<tr>
<td>CHLD 83</td>
<td>Current Issues in Child Development</td>
<td>1</td>
<td>Provides students with a 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.</td>
</tr>
<tr>
<td>CHLD 84</td>
<td>Guidance and Discipline in Child</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>CHLD 85</td>
<td>Infants At Risk</td>
<td>3</td>
<td>Principles and methods of working with infants and toddlers who are disabled or at-risk in the early childhood setting. Emphasis is placed on issues affecting normal development prevention, intervention, referrals and transition to school. Course will prepare teachers of young children for appropriate planning in these settings.</td>
</tr>
<tr>
<td>CHLD 89</td>
<td>Early Childhood Development Field Work</td>
<td>1</td>
<td>A teacher-supervised work experience course which permits students to apply early childhood development principles in community preschools. CHLD 69 Seminar will supplement student's progress. 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.</td>
</tr>
<tr>
<td>CHLD 92</td>
<td>Family Child Care</td>
<td>3</td>
<td>An overview 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.</td>
</tr>
<tr>
<td>CHIN 1</td>
<td>Elementary Chinese</td>
<td>4</td>
<td>Intended for students without previous exposure to Chinese. Begins to develop the ability to converse, read, and write in Mandarin Chinese. Includes the study of essentials of pronunciation, vocabulary, idioms, and grammatical structures along with an introduction to Chinese culture.</td>
</tr>
<tr>
<td>CHIN 2</td>
<td>Continuing Elementary Chinese</td>
<td>4</td>
<td>Further develops conversational, reading, and writing skills in Mandarin Chinese with special emphasis on verbs, grammar, and extension of vocabulary.</td>
</tr>
<tr>
<td>CHIN 4</td>
<td>Continuing Intermediate Chinese</td>
<td>4</td>
<td>Enables students to use Mandarin in traveling, telling stories, describing experiences and discussing Chinese literary works, festivals and food. Students learn advanced grammar such as the directional and potential complements, repetition of adjectives, the focus construction, the ba and bei structures.</td>
</tr>
<tr>
<td>CHIN 35</td>
<td>Chinese Language Laboratory</td>
<td>.5</td>
<td>An independent study laboratory course for students who wish to improve their skills in Mandarin Chinese. May supplement any other 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</td>
<td>PC and peripheral servicing techniques, preventative maintenance, hardware configurations, software configurations, software diagnostics, and the use of test equipment.</td>
</tr>
</tbody>
</table>
COURSE DESCRIPTIONS

CNET 52 — PC Operating Systems  4 Units
54 hours of lecture. Degree Appropriate
54 hours of 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.

CNET 54 — PC Troubleshooting  4 Units
54 hours of lecture. Degree Appropriate
54 hours of 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.

CNET 56 — Computer Networks  4 Units
54 hours of lecture. Degree Appropriate
54 hours of 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 MSCE certifications.

CNET 60 — A+ Certification Preparation  3 Units
(May be taken two times for credit.) Degree Appropriate
54 hours of lecture.
Advisory: CNET 54
Prepares the student and qualified computer technician for the A+ certification examination. All aspects of the Core OS test modules will be stressed through both lecture review and test simulation software.

CNET 62 — Network+ Certification Preparation  3 Units
(May be taken two times for credit.) Degree Appropriate
54 hours of 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 industry or who wish to become Network+ certified will find this course invaluable.

CNET 64 — Server + Certification Preparation  3 Units
Spring Semester Degree Appropriate
(May be taken two times for credit.) 54 hours of lecture.
Advisory: CNET 56 taken prior
Prepares the computer/network service technician for the CompTIA Server+ certification examination.

CNET 66 — Security + Certification Preparation  3 Units
Spring Semester Degree Appropriate
(May be taken two times for credit.) 54 hours of lecture.
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.

COMP 1 — Computer Keyboarding  4 Units
54 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Develops 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; includes keyboarding of letters, tables and manuscripts.

COMP 1A — Computer Keyboarding  2 Units
27 hours of lecture. Degree Appropriate, CSU
27 hours of 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.

COMP 1B — Computer Keyboarding  2 Units
27 hours of lecture. Degree Appropriate, CSU
27 hours of lab.
Advisory: COMP 10 or COMP 12 or CISB 13 or CISB 15
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.

COMP 2 — Intermediate Computer Keyboarding  4 Units
54 hours of lecture. Degree Appropriate
54 hours of 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.

COMP 10 — Operating the Macintosh Computer  1.5 Units
Degree Appropriate, CSU
27 hours of 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.

COMP 11 — Internet Research for Business  2 Units
Degree Appropriate, CSU
27 hours of lecture.
27 hours of lab.
Advisory: COMP 10 or CISB 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 manipulating information, and use the entire Internet, newsgroups, FTP (File Transfer Protocol) and mailing lists.

COMP 12 — Office Computer Applications  4 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
54 hours of 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.

COMP 13 — Using Web Page Software  4 Units
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
54 hours of lab.
Advisory: COMP 10 or COMP 12 or CISB 13 or CISB 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.

COMP 18 — Data Entry  3 Units
(May be taken two times for credit.) Degree Appropriate
54 hours of lecture.
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.
Course Descriptions

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 hours of lecture.
54 hours of lab.
Advisory: COMP 10 or CISB 13 and ability to type 25 wpm with test
verification at first class meeting

Training and skill building in filing systems and procedures,
(54 hours of lecture.
54 hours of 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 create 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
54 hours of lecture. Degree Appropriate
Advisory: COMP 1 or COMP 1A, or BUSO 1 or BUSO 1A, and BUSO 5
Training and skill building in filing systems and procedures,
proofreading, telephone techniques, faxing, emailing, and electronic
calendar and appointments.

Students who repeat this course will improve skills through
further instruction and practice.

COMP 60 — Desktop Publishing with InDesign or Pagemaker 4 Units
(May be taken three times for credit.) Degree Appropriate,
CSU
54 hours of lecture.
54 hours of lab.
Advisory: COMP 10 or COMP 12 or CISB 13 or CISB 15
Use Adobe InDesign or Pagemaker to design and produce effective publications.
Includes creating pages, barcodes, and storyboards; developing
appropriate text content; adding sound, animation, and movies.

Students who repeat this course will improve skills through
further instruction and practice.

COMP 62 — Desktop Publishing with QuarkXPress 4 Units
(May be taken two times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
54 hours of lab.
Advisory: COMP 10 or COMP 12 or CISB 13 or CISB 15 or
equivalent experience

Using QuarkXPress desktop publishing software on a microcomputer to
integrate text and graphics for designing, editing, and producing high-quality business publications.
Students who repeat this course will improve skills through further instruction and practice.

COMP 63 — Adobe Illustrator for Desktop Publishers 4 Units
(May be taken three times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
54 hours of lab.
Advisory: COMP 10 or COMP 12 or CISB 13 or CISB 15 or equivalent
experience

Using Adobe Illustrator on a microcomputer to design and produce
graphic images that can be used independently or incorporated into a
page layout or presentation program. Students who repeat this course
will improve skills through further instruction and practice.

COMP 64 — Desktop Publishing Seminar 2.5 Units
(May be taken three times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
36 hours of lecture.
27 hours of lab.
Prerequisite: COMP 60 or COMP 62 and COMP 65
Advisory: COMP 63

Students who produce “real life” publishing products emphasizing
creative design and effective production. Students will gain practical
experience through working with clients and working in teams.
Students who repeat this course will improve skills and create
additional portfolio pieces.

COMP 65 — Modifying Images for Desktop Publishing 4 Units
(May be taken three times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
54 hours of lab.
Advisory: COMP 10 or COMP 12 or CISB 13 or CISB 15 or equivalent
experience

Using Adobe Photoshop on a microcomputer as applied from the office
perspective. Students will learn to modify images that can be used
independently or incorporated into a page layout or presentation
program. Students who repeat this course will improve skills through
further instruction and practice.

COMP 66 — Transcription Techniques 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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 67 — Lettering and Typography 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.

Students who repeat this course will improve skills through
further instruction and practice.

COMP 68 — Transcription Techniques 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.

Students who repeat this course will improve skills through
further instruction and practice.

COMP 70 — Microsoft Word — Level 2 1 Unit
(May be taken two times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
18 hours of lecture.
Prerequisite: COMP 120A or COMP 12 or CISB 15

A continuation of COMP 120A with hands-on instruction in word
processing in a Windows environment. Includes advanced formatting
tools, tables, columns, outlines, merge, sort, graphics and table of
contents. Students who repeat this course will improve skills through
further instruction and practice.

COMP 120A — Microsoft Word — Level 1 1 Unit
(May be taken two times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
18 hours of lecture.
Advisory: COMP 10 or CISB 13 and ability to type 25 wpm with test
verification at first class meeting

Hands-on instruction in word processing in a Windows environment.
Includes initial creation and revision of documents, formatting, spell
check, thesaurus, and file management. Students who repeat this
course will improve skills through further instruction and practice.

COMP 120B — Microsoft Word — Level 2 1 Unit
(May be taken two times for credit.) Degree Appropriate
(May be taken for Credit/No Credit only.)
18 hours of lecture.
Prerequisite: COMP 120A or COMP 12 or CISB 15

A continuation of COMP 120A with hands-on instruction in word
processing in a Windows environment. Includes advanced formatting
tools, tables, columns, outlines, merge, sort, graphics and table of
contents. Students who repeat this course will improve skills through
further instruction and practice.

COMP 150 — Basic PowerPoint 1 Unit
(May be taken for Credit/No Credit only.) Degree Appropriate
18 hours of 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 180 — Advanced PowerPoint 1 Unit
(May be taken for Credit/No Credit only.) Degree Appropriate
18 hours of lecture.
Overview and advanced instruction using one of the most popular
presentation software packages. Recommended for experienced students
who need advanced techniques for creating presentations.

Computer Graphics

GRAP 1 — Computer Graphics Lab 1 Unit
Formerly GRAP 50
Degree Appropriate
(May be taken for Credit/No Credit only.)
54 hours of lab.
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.
Course Descriptions

GRAP 10 — Photo Editing with Photoshop  
3 Units  
Formerly GRAP 52A  
Degree Appropriate  
(May be taken two times for credit.)  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
54 hours of lab.  
Advisory: COMP 10 or PHOT 4  
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. Students who repeat this course will improve skills through further instruction and practice.

GRAP 12 — Advanced Photo Editing with Photoshop  
3 Units  
Formerly GRAP 52B  
Degree Appropriate  
(May be taken two times for credit.)  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
54 hours of 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 14 — Digital Color Management  
3 Units  
Degree Appropriate  
(May be taken two times for credit.)  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
54 hours of lab.  
Prerequisite: GRAP 10  
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. Students who repeat this course will improve skills through further instruction and practice.

GRAP 16 — Digital Image Design with Illustrator & Freehand  
3 Units  
Formerly GRAP 49  
Degree Appropriate  
(May be taken two times for credit.)  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
54 hours of 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  
3 Units  
Formerly GRAP 58  
Degree Appropriate  
(May be taken two times for credit.)  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
54 hours of lab.  
Prerequisite: GRAP 16  
Corequisite: GRAP 1 (May have been taken previously)  
Advanced digital imaging 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 movie images for digital composting and post-production. Students who repeat this course will improve skills through further instruction and practice.

GRAP 20 — Applying Photos and Images in Multimedia  
3 Units  
Formerly GRAP 54  
Degree Appropriate  
(May be taken two times for credit.)  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
54 hours of 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's 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 24 — Work Experience in Computer Graphics  
2 Units  
(May be taken four times for credit.)  
Degree Appropriate  
(May be taken for option of letter grade or Credit/No Credit.)  
150 hours of 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  
2 Units  
Formerly GRAP 53  
Degree Appropriate  
(May be taken for option of letter grade or Credit/No Credit.)  
18 hours of lecture.  
54 hours of 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  
Formerly GRAP 53  
Degree Appropriate, CSU  
(May be taken for Credit/No Credit only.)  
36 hours of lecture.  
In order to offer selected students recognition for their academic interests and ability, 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.

COMPUTER INFORMATION SYSTEMS: 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 hours of 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 hours of 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.
**Course Descriptions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISX 96</td>
<td>Laboratory Studies in Computer Information Systems</td>
<td>3</td>
<td>Degree Appropriate, CSU (May be taken two times for credit.) 162 hours of 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 competencies in Computer Information Systems.</td>
</tr>
<tr>
<td>CISX 97</td>
<td>Work Experience in Computer Information Systems</td>
<td>1</td>
<td>Degree Appropriate, CSU (May be taken four times for credit.) 75 hours of 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.</td>
</tr>
</tbody>
</table>

**COMPUTER INFORMATION SYSTEMS: BEGINNING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISB 11</td>
<td>Computer Information Systems</td>
<td>3.5</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. 27 hours of 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.</td>
</tr>
<tr>
<td>CISB 13</td>
<td>Microsoft Windows</td>
<td>2</td>
<td>Degree Appropriate, CSU 27 hours of lecture. 27 hours of lab. Hands-on instruction using Microsoft Windows Operating System to manage files, folders, and disks. Personalize the Windows environment. Use the Search feature to locate files. Browse the web using Internet Explorer.</td>
</tr>
</tbody>
</table>

**COMPUTER INFORMATION SYSTEMS: DATABASE**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISB 15</td>
<td>Microcomputer Applications</td>
<td>4</td>
<td>54 hours of lecture. Degree Appropriate, CSU, UC 54 hours of 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.</td>
</tr>
<tr>
<td>CISB 21</td>
<td>Microsoft Excel</td>
<td>4</td>
<td>54 hours of lecture. Degree Appropriate 54 hours of lab. Spreadsheet concepts using Microsoft Excel including formatting formula and function use, charting, linking worksheets, pivot tables, macros, and VBA code basics.</td>
</tr>
</tbody>
</table>

**COMPUTER INFORMATION SYSTEMS: ADVANCED**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISB 11</td>
<td>Database Management – Microcomputers</td>
<td>4</td>
<td>54 hours of lecture. Degree Appropriate, CSU 54 hours of 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.</td>
</tr>
<tr>
<td>CISB 14</td>
<td>Advanced Database Management – Microcomputers</td>
<td>4</td>
<td>54 hours of lecture. Degree Appropriate 54 hours of lab. Advisory: CISD 11 and CISD 13. Provides 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.</td>
</tr>
<tr>
<td>CISB 21</td>
<td>SQL Server</td>
<td>4</td>
<td>54 hours of lecture. Degree Appropriate 54 hours of 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.</td>
</tr>
<tr>
<td>CISD 31</td>
<td>Database Management</td>
<td>4</td>
<td>54 hours of lecture. Degree Appropriate 54 hours of lab. Advisory: CISD 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.</td>
</tr>
<tr>
<td>CISD 32</td>
<td>Oracle Forms and Reports</td>
<td>4</td>
<td>54 hours of lecture. Degree Appropriate 54 hours of 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 Builder. Reports and interactive forms will use single and multiple tables in a realistic business setting.</td>
</tr>
<tr>
<td>CISD 33</td>
<td>Oracle Database Architecture and Administration</td>
<td>4</td>
<td>54 hours of lecture. Degree Appropriate 54 hours of lab. Advisory: CISD 31 highly recommended. Provides the Oracle database administrator (DBA) a firm foundation in basic administrative tasks and the necessary knowledge and skills to set up, maintain, organize 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.</td>
</tr>
<tr>
<td>CISD 34</td>
<td>High Performance Oracle SQL Tuning</td>
<td>2</td>
<td>27 hours of lecture. Degree Appropriate 27 hours of 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 Optimizers, resources, and path tracing.</td>
</tr>
<tr>
<td>CISD 40</td>
<td>Database Design</td>
<td>2</td>
<td>27 hours of lecture. Degree Appropriate 27 hours of lab. Advisory: CISD 11. Students will analyze database needs and functions, create data models, E-R diagrams and UML diagrams, use normalization rules and principles to create properly-designed databases and learn basic DBA objectives and tasks.</td>
</tr>
</tbody>
</table>
Course Descriptions

CISM 21 — Client/Server Architecture 4 Units
54 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Advisory: CSD 14 or CISP 14 or CISN 16
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 31 — AS/400 System Administration 4 Units
54 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Advisory: CSD 31 or CISP 31
The AS/400 computer system: Batch and interactive CL system utility programs, including a standard error handling routine, CL parameter passing, data areas, message subfiles, and *OUTFILE processing. Save and Restore requirements, backup strategies, the AS/400 System Software upgrade procedures, tape device maintenance, work management objects, work management scenarios, disk analysis, and job scheduling. The student will also be exposed to designing and implementing Object-based CL solutions. Course includes exposure to AS/400 development and management.

COMPUTER INFORMATION SYSTEMS: MANAGEMENT

CISN 31 — Linux Operating System 4 Units
54 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Advisory: CISN 31
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 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Advisory: CISN 31
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.
CISP 11 — Basic Programming 4 Units
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Advisory: CISB 11
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 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Advisory: CISP 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 record sets using SQL producing business graphics; using OLE objects and DLLs; distributing applications.

CISP 21 — Programming in Java 4 Units
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Advisory: CISP 11 or CISP 15
Programming using Java as the programming language. Design and develop object-oriented programs and Web-based applets; 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 hours of lecture. Degree Appropriate
54 hours of lab.
Advisory: CISP 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).

CISP 31 — Programming in C++ 4 Units
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Advisory: CISP 11 or CISP 21
Object-oriented programming using C++ as the programming language. Object oriented design, documentation, and debugging techniques. Elementary control structures, classes, overload operators and functions, single and multiple inheritance.

CISP 34 — Advanced C++ Programming 4 Units
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Advisory: CISP 31

CISP 39 — Programming in C# 4 Units
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Advisory: CISP 11 or CISP 31
Plan, develop and debug C# applications using Windows Forms and Web Forms. Course covers loops, if statements, switch blocks, database connections, multiple forms, object-oriented programming concepts. Course taught in hands-on environment and requires projects implementing each concept.

CISP 33 — Advanced Programming in C# 4 Units
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture. Degree Appropriate
54 hours of lab.
Advisory: CISP 31
Advanced programming concepts using C#. Designing, coding, testing and implementing object-oriented multi-tier applications; deploying, searching, and updating SQL/Client databases using Data Readers and Data Adapters with both Windows Forms and Web Forms; creating user controls, Web Services, and container classes classes; creating HTML help files, deploying applications, and developing mobile applications.

CISP 51 — Principles of Object-Oriented Design 2 Units
27 hours of lecture. Degree Appropriate
27 hours of lab.
Advisory: CISP 11 or CISP 21 or CISP 31
Provides instruction in object-oriented design and patterns, vital concepts for object-oriented programming language. Includes object-oriented design, patterns and UML within programming that will enable students to build large packages and business applications.

CISP 90T — Topics in Computer Programming 4 Units
(May be taken four times for credit.)
54 hours of lecture. Degree Appropriate
54 hours of lab.
Covers special topics in computer programming providing opportunity to explore disciplines in greater depth. The content and methods of study vary from semester to semester depending upon the particular project and topics under consideration.

COMPUTER INFORMATION SYSTEMS: SECURITY

CISS 11 — Practical Computer Security 2 Units
27 hours of lecture. Degree Appropriate
27 hours of lab.
Advisory: CISB 11
Introductory course in computer security. Provides awareness for all computer users to protect user accounts and computer systems from attacks. Hands-on projects illustrate security software and hardware configuration.

CISS 13 — Principles of Information Systems Security 4 Units
54 hours of lecture. Degree Appropriate
54 hours of lab.
Advisory: CISB 11
Introductory course in information systems security covering the ten domains needed for the Certified Information Systems Security Professional (CISSP).

CISS 15 — Operating Systems Security 4 Units
54 hours of lecture. Degree Appropriate
54 hours of lab.
Advisory: CISB 11, CISP 21
Advanced aspects of operating systems security: from how attackers operate to how viruses strike. Covers strengthening operating systems and repelling attacks. Fundamental knowledge of a full range of security concepts and techniques and application to different operating systems (Windows, Unix, etc.)

CISS 21 — Network Vulnerabilities and Countermeasures 4 Units
54 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Concepts of network vulnerabilities from a hacker’s perspective. Addresses the latest cutting edge attacks and common attacks still prevalent though hands-on lab assignments; explores legal issues associated with computer network attacks; provides students knowledge to design, build and operate network systems to prevent, detect, and respond to attacks. Communication protocols, mediums, security classes, well-known ports and services, discovery and scanning techniques, port, socket and service vulnerability penetrations are some topics addressed.
COURSE DESCRIPTIONS

**CISW 24 — Secure Server Side Web Programming** 4 Units
54 hours of lecture. Degree Appropriate
54 hours of lab.
Advisor: CISW 21
Advanced Web programming such as creating Web user interfaces like interactive CGI (Common Gateway Interface), programming databases, managing files, extracting information, report formatting, and accessing Web servers by using a Web scripting or programming language like PERL.

**CISW 31 — Web Servers** 4 Units
54 hours of lecture. Degree Appropriate
54 hours of lab.
Advisory: CISW 31 OR CISW 21
Concepts and skills in planning, installing, and managing Web Servers like Apache, Jigsaw, MS Personal Web Server or IIS. Course topics include kernel reconfiguration, device drivers, NFS setup, mail, news, FTP, firewall, security, encryption, database servers, subnetworking, routing and bridging, and DNS.

**CISW 41 — XML Secure Programming** 3 Units
54 hours of lecture. Degree Appropriate
Advisory: CISW 21
Principles, components and benefits of the Extensible Markup Language (XML), including advanced concepts of XPointers, XLink, and XSLT. Apply XML secure programming using DOM and SAX and standards such as Canonicalization, Signatures and Encryption.

**CSCI 110 — Fundamentals of Computer Science** 3.5 Units
54 hours of lecture. Degree Appropriate, CSU, UC
27 hours of lab.
Prerequisite: MATH 71 or MATH 71B or MATH 72 or equivalent
Advisory: Eligibility for ENGL 1A
Overview of internet concepts and how to use Internet technologies securely, including: e-mail, World Wide Web, chat, instant messaging, voice over IP, searching the Internet, file-sharing, streaming media, creating Web pages and Web sites, blogging, podcasting, wikis, RSS, social networking, multiplayer gaming, and e-commerce.

**CSCI 140 — C++ Language and Object Development** 4 Units
54 hours of lecture. Degree Appropriate
54 hours of lab.
Prerequisite: Completion of CSCI 110
Introduction to C++ language and object oriented programming with C++ as well as general concepts and techniques of computer programming. Topics include: Java expressions, flow control, methods and program structure, Java classes, loading, 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.

**CSCI 150 — Assembly Language/Machine Architecture** 3 Units
CSCI 150 + 150L = CAN CSCI 10 Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: CSCI 110
Corequisite: CSCI 150L
Organization and operation of real computer systems at the assembly language level using the Intel 80x86 family of processors; mapping statements and constructs in a high-level language onto sequences of machine instructions; internal representations of simple data types and structures; numerical computation; noting various data representation errors and potential procedural errors; investigation of basic principles of operating systems; and programming language translation process.

**CSCI 150L — Assembly Language Laboratory** 1 Unit
CSCI 150 + 150L = CAN CSCI 10 Degree Appropriate, CSU, UC
(May be taken for Credit/No Credit only.)
54 hours of lab.
Corequisite: CSCI 150
Organization and operation of real computer systems at the assembly language level using the Intel 80x86 family of processors; mapping statements and constructs in a high-level language onto sequences of machine instructions; internal representations of simple data types and structures; numerical computation; noting various data representation errors and potential procedural errors; investigation of basic principles of operating systems; and programming language translation process.

**CSCI 170 — Introduction to Unix Operating System** 3.5 Units
Fall Semester Degree Appropriate, CSU, UC
54 hours of lecture.
27 hours of lab.
Prerequisite: Completion of CSCI 110
Introduction to the UNIX operating system, system administration and networking. Topics include: process synchronization and communication mechanisms, process management, scheduling and protection, memory organization and management, virtual memory, I/O devices, file systems, networking, system administration for UNIX.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites/Co-requisites</th>
<th>Lecture Hours</th>
<th>Degree Appropriate/CSU, UC</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 190</td>
<td>Discrete Mathematics Applied to Computer Science</td>
<td>4</td>
<td>72 hours of lecture. Prerequisite: MATH 71 or equivalent. Provides students with the mathematical background necessary in Computer Science: set theory, logic, modular arithmetic, combinatorics, finite probability and graphs. Topics include propositional and predicate calculus, recursion, binary search trees and counting techniques.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCI 210</td>
<td>Applied Logic for Computers</td>
<td>3</td>
<td>54 hours of lecture. Prerequisite: CSCI 110. Basic concepts of digital systems, introduction to Boolean algebra, truth tables, Karnaugh maps, combinational elements and networks, state diagrams, state tables, sequential elements and networks.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCI 220</td>
<td>Data Structures I</td>
<td>3</td>
<td>Fall Semester. Prerequisite: CSCI 140 or CSCI 145. Corequisite: CSCI 220L. 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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCI 220L</td>
<td>Data Structures I Laboratory</td>
<td>1</td>
<td>Fall Semester. Prerequisite: CSCI 220L. An independent study program designed to complement the lecture material presented in CSCI 220, Data Structures. Hands-on computer work will include problem solving in linear data structures, strings, and trees.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCI 230</td>
<td>Data Structures II</td>
<td>3</td>
<td>Spring Semester. Prerequisite: CSCI 220. Corequisite: CSCI 230L. Basic searching/sorting algorithms, hashing, graphs, memory/disk management, B-trees, advanced tree structures and analysis.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCI 230L</td>
<td>Data Structures II Laboratory</td>
<td>1</td>
<td>Spring Semester. Prerequisite: CSCI 230. An independent study program designed to complement the lecture material presented in CSCI 230, Data Structures II. Hands-on computer work will include problem solving in searching, sorting, and graphs.</td>
<td></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>Prerequisites/Co-requisites</th>
<th>Lecture Hours</th>
<th>Degree Appropriate/CSU, UC</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORS 10</td>
<td>Introduction to Correctional Sciences</td>
<td>3</td>
<td>Spring Semester. Prerequisite: CSCI 140 or CSCI 145. Corequisite: CSCI 220L. 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.</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CORS 15</td>
<td>Control and Supervision of the Offender</td>
<td>3</td>
<td>Fall Semester. Prerequisite: CSCI 140 or CSCI 145. Corequisite: CSCI 220L. Examine methods of controlling and supervising inmates. Emphasizes California’s methods in rapidly-expanding institutions.</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CORS 20</td>
<td>Correctional Law</td>
<td>3</td>
<td>Spring Semester. Prerequisite: CSCI 140 or CSCI 145. Corequisite: CSCI 220L. Legal and due process rights for inmates. Inmate rights vs. needs of society. State, federal, and appellate court decisions.</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CORS 25</td>
<td>Probation and Parole</td>
<td>3</td>
<td>Fall Semester. Prerequisite: CSCI 140 or CSCI 145. Corequisite: CSCI 220L. 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.</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CORS 30</td>
<td>Ethnic Relations in Corrections</td>
<td>3</td>
<td>Spring Semester. Prerequisite: CSCI 140 or CSCI 145. Corequisite: CSCI 220L. A historical survey of minority roles, problems and relationships in America. Stresses cultural and racial differences and interpersonal relationships of correctional staff and clients.</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CORS 35</td>
<td>Interviewing and Counseling in Corrections</td>
<td>3</td>
<td>Spring Semester. Prerequisite: CSCI 140 or CSCI 145. Corequisite: CSCI 220L. 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>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CORS 40</td>
<td>Crime and Delinquency</td>
<td>3</td>
<td>Spring Semester. Prerequisite: CSCI 140 or CSCI 145. Corequisite: CSCI 220L. 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.</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CORS 45</td>
<td>The Violent Offender</td>
<td>3</td>
<td>Spring Semester. Prerequisite: CSCI 140 or CSCI 145. Corequisite: CSCI 220L. Violent crimes of felony assault, robbery, rape, the various types of homicide, and the characteristics of both the offender and the victim.</td>
<td>54</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COUNSELING**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites/Co-requisites</th>
<th>Lecture Hours</th>
<th>Degree Appropriate/CSU, UC</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 1</td>
<td>Introduction to College</td>
<td>1</td>
<td>(May be taken two times for credit.) 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. Development of decision making and goal setting skills and identification of barriers to success. Explores careers and job search techniques.</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COUN 2</td>
<td>College Success Strategies</td>
<td>3</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) Prerequisite: Eligibility for ENGL 68. 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.</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COUN 5</td>
<td>Career/Life Planning</td>
<td>3</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) Prerequisite: Eligibility for ENGL 68. 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.</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COUN 20</td>
<td>Peer Counselor Training</td>
<td>2</td>
<td>(May be taken two times for credit.) Prerequisite: Eligibility for ENGL 68. Designed for group experiences with interpersonal communication and discussion of approaches to peer counseling and advising. Provides opportunities for students to develop skills with a variety of communication styles that include open expression, active listening, and feedback. Upon completion of this course, opportunities may be available for students to become employed as peer counselors. Students who repeat this course will improve skills through further instruction and practice.</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COUN 50</td>
<td>College Orientation and Educational Planning</td>
<td>.5</td>
<td>(May be taken for Credit/No Credit only.) Prerequisite: Eligibility for ENGL 68. Helps students to take charge of their college experience. Students will receive important information about Mt. SAC’s support services, academic policies and regulations, study skills/test-taking techniques, and requirements for educational planning. Intended to assist students in the development of an individual educational plan.</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Course Descriptions

COUN 51 — Career Planning 1 Unit
(May be taken two times for credit.) Degree Appropriate, CSU
(May be taken for Credit/No Credit only.) 18 hours of lecture.
Designed for students who want assistance in making career decisions.
A variety of assessments, inventories, and computer generated
information will be used in analyzing the student's potential in the
world of work. Students who repeat this course will improve skills
through further instruction and practice.

COUN 54 — Single Parent Academy 3 Units
54 hours of lecture. Degree Appropriate
Develop personal, educational, and career life planning skills for
single parents.

COUN 57 — College Orientation and Educational Planning 1 Unit
(May be taken two times for credit.) Degree Appropriate
18 hours of lecture.
Included are requirements for certificates and degrees and the
requirements necessary for transferring to four-year colleges and
universities as a student-athlete or student. Transfer rules for NCAA and
NAIA will be explained, along with CLCC rules. Students required to
complete an educational plan. Students who repeat this course will
improve skills through further instruction and practice.

COUN 99A — Special Projects in Counseling 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
18 hours of 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.

DANCE: ACTIVITY

DNCE 1 — Ballet Fundamentals 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC
72 hours of activity.
Introduces the fundamentals of ballet and an appreciation of ballet as
an art form. Students who repeat this course will improve profciency through
continued instruction and practice.

DNCE 1-2 — Ballet Fundamentals .5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of activity.
Introduces the fundamentals of ballet and an appreciation of ballet as
an art form. Students who repeat this course will improve profciency through
continued instruction and practice.

DNCE 2A — Ballet I 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
36 hours of activity.
Basic vocabulary, technique, and movement combinations for ballet.
Students who repeat this course will improve profciency through
continued instruction and practice.

DNCE 2A-2 — Ballet I .5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of activity.
Basic vocabulary, technique and movement combinations for ballet.
Students who repeat this course will improve skills through further
instruction and practice.

DNCE 2B — Ballet II 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 hours of activity.
Intermediate technique, vocabulary and movement combinations
for ballet. Students who repeat this course will improve profciency through
continued instruction and practice.

DNCE 2B-2 — Ballet II .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 hours of activity.
Intermediate technique, vocabulary and movement combinations
for ballet. Students who repeat this course will improve profciency through
continued instruction and practice.

DNCE 3 — Ballet Performance 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.)
36 hours of activity.
Introduces the experienced dance student to the performance aspect
of ballet. Provides the opportunity to develop the ability to analyze form
leading to composition of advanced movement combinations. Students
who repeat this course will improve profciency through continued
instruction and practice.

DNCE 3-2 — Ballet Performance .5 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of activity.
Introduces the experienced dance student to the performance aspect
of ballet. Provides the opportunity to develop the ability to analyze form
leading to composition of advanced movement combinations. Students
who repeat this course will improve profciency through continued
instruction and practice.

DNCE 4 — Choreography 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 hours of activity.
Prerequisite: DNCE 12A or DNCE 12B or DNCE 13
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNCE 4-2</td>
<td>Choreography</td>
<td>.5</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 4-3</td>
<td>Choreography</td>
<td>1</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 11A-2</td>
<td>Social Dance Forms I</td>
<td>.5</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, Foxtrot, Waltz, and Tango. Students who repeat this course will improve proficiency through continued instruction and practice.</td>
</tr>
<tr>
<td>DNCE 11B</td>
<td>Social Dance Forms II</td>
<td>1</td>
<td>Designed to teach basic social dance techniques. Focus on fundamentals of rhythm, dance positions, dance formations and introduction of advanced techniques to be used in the study of, but not limited to Swing, Salsa, Foxtrot, Waltz, Folk, Polka, Cha Cha and Tango. Students who repeat this course will improve proficiency through continued instruction and practice.</td>
</tr>
<tr>
<td>DNCE 12A</td>
<td>Modern I</td>
<td>1</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 12A-2</td>
<td>Modern I</td>
<td>.5</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</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 12B-2</td>
<td>Modern II</td>
<td>.5</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 13</td>
<td>Modern Performance</td>
<td>2</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</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 13-3</td>
<td>Modern Performance</td>
<td>1</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 14A</td>
<td>Jazz I</td>
<td>1</td>
<td>Basic vocabulary, 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 14A-2</td>
<td>Jazz I</td>
<td>.5</td>
<td>Basic vocabulary, 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</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</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 15</td>
<td>Jazz Performance</td>
<td>1</td>
<td>Introduces the experienced dancer to the performance aspect 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.</td>
</tr>
<tr>
<td>DNCE 15-2</td>
<td>Jazz Performance</td>
<td>.5</td>
<td>Introduces the experienced dancer to the performance aspect 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.</td>
</tr>
</tbody>
</table>
Course Descriptions

DNCE 17 — Jazz Fundamentals 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 hours of 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
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of 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 17-3 — Jazz Fundamentals 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 hours of 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 18A — Tap I 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 hours of 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 and practice.

DNCE 18A-2 — Tap I .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 hours of 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 and practice.

DNCE 18B — Tap II 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 hours of 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 and practice.

DNCE 18B-2 — Tap II .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 hours of activity.
Intermediate technique, rhythms and routines for tap dance. Students who repeat this course will improve skills through further instruction and practice.

DNCE 19 — Tap Performance 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of 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 21 — Dance Rehearsal 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
108 hours of 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 22 — Dance Rehearsal 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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 22-2 — Dance Rehearsal .5 Unit
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of 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 — Dance Production 2 Units
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
108 hours of 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 24-3 — Dance Production 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
81 hours of 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
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of 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 29 — Theater Dance II 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of activity.
Provides an opportunity to learn complex dance excerpts from various theater musicals and/or movies. Students who repeat this course will improve skills through further instruction and practice.

DNCE 29-2 — Theater Dance II .5 Unit
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of activity.
Provides an opportunity to learn complex dance excerpts from various theater musicals and/or movies. Students who repeat this course will improve skills through further 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 30 —</td>
<td>Contemporary Dance</td>
<td>1 Unit</td>
<td>Provides the beginning to advanced dancer the opportunity to experience different techniques of leading commercial dancers and choreographers. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 30-2 —</td>
<td>Contemporary Dance</td>
<td>.5 Unit</td>
<td>Provides the beginning to advanced dancer the opportunity to experience different techniques of leading commercial dancers and choreographers. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 31 —</td>
<td>Classical Dance</td>
<td>2 Units</td>
<td>Provides the proficient ballet student the opportunity to experience the different schools of ballet technique. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 31-2 —</td>
<td>Classical Dance</td>
<td>.5 Unit</td>
<td>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.</td>
</tr>
<tr>
<td>DNCE 31-3 —</td>
<td>Classical Dance</td>
<td>1 Unit</td>
<td>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.</td>
</tr>
<tr>
<td>DNCE 32 —</td>
<td>Commercial Dance</td>
<td>1 Unit</td>
<td>Provides the intermediate to advanced jazz dancer the opportunity to experience the different techniques of leading commercial dancers, teachers and choreographers. Students who repeat this course will improve skills through further practice.</td>
</tr>
<tr>
<td>DNCE 32-2 —</td>
<td>Commercial Dance</td>
<td>.5 Unit</td>
<td>Provides the intermediate to advanced jazz dancer the opportunity to experience the different techniques of leading commercial dancers, teachers and choreographers. Students who repeat this course will improve skills through further practice.</td>
</tr>
<tr>
<td>DNCE 33 —</td>
<td>Improvisation</td>
<td>1 Unit</td>
<td>Provides the opportunity to experience the creative process of improvisation in dance and choreography. For all levels of Modern Dance. Students who repeat this course will improve proficiency through continued instruction and practice.</td>
</tr>
<tr>
<td>DNCE 34 —</td>
<td>Dance Directives</td>
<td>1 Unit</td>
<td>Provides the opportunity for the advanced dancer to learn choreography and to perform repertory pieces at workshops and special events. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 35 —</td>
<td>Repertory</td>
<td>2 Units</td>
<td>Provides the opportunity for the advanced dancer to learn choreography and to perform repertory pieces at workshops and special events. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 36 —</td>
<td>Dance Improvisation</td>
<td>1 Unit</td>
<td>Provides the intermediate to advanced jazz dancer the opportunity to experience the different techniques of leading commercial dancers, teachers and choreographers. Students who repeat this course will improve skills through further practice.</td>
</tr>
<tr>
<td>DNCE 37 —</td>
<td>Dance Improvisation</td>
<td>1 Unit</td>
<td>Provides the intermediate to advanced jazz dancer the opportunity to experience the different techniques of leading commercial dancers, teachers and choreographers. Students who repeat this course will improve skills through further practice.</td>
</tr>
<tr>
<td>DNCE 38 —</td>
<td>Dance Improvisation</td>
<td>1 Unit</td>
<td>Provides the opportunity for the advanced dancer to learn choreography and to perform repertory pieces at workshops and special events. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 39A —</td>
<td>Alignment and Correctives I</td>
<td>1 Unit</td>
<td>Provides the opportunity for the advanced dancer to learn choreography and to perform repertory pieces at workshops and special events. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 39A-2 —</td>
<td>Alignment and Correctives I</td>
<td>.5 Unit</td>
<td>Provides the opportunity for the advanced dancer to learn choreography and to perform repertory pieces at workshops and special events. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 39B —</td>
<td>Alignment and Correctives II</td>
<td>1 Unit</td>
<td>Provides the opportunity for the advanced dancer to learn choreography and to perform repertory pieces at workshops and special events. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>DNCE 39B-2 —</td>
<td>Alignment and Correctives II</td>
<td>.5 Unit</td>
<td>Provides the opportunity for the advanced dancer to learn choreography and to perform repertory pieces at workshops and special events. 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>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>
</tbody>
</table>
## COURSE DESCRIPTIONS

### DANCE: THEORY

#### DNCE 40-2 — Conditioning Through Dance  
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 hours of 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.

#### DN-T 18 — Introduction to Dance  
3 Units  
54 hours of lecture.  
Degree Appropriate, CSU, UC  
Advisory: Eligibility for ENGL 68  
A survey of the profession of dance and its various art forms through lecture, discussion, demonstration, and participation. Includes multicultural dance interpretations.

#### DN-T 20 — History and Appreciation of Dance  
3 Units  
54 hours of lecture.  
Degree Appropriate, CSU, UC  
Advisory: Eligibility for ENGL 68  
Survey of dance in western civilization. History of dance in chronological sequence emphasizing the cultural background and historical development of various forms and styles of dance to include discussion of the influence of dance on other art forms.

### DISABLED STUDENTS

#### DSPS 10 — College Transition Strategies for Students with Disabilities  
3 Units  
Formerly DSPS 61  
Non-Degree Credit  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of 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.

#### DSPS 11 — Assessment of Learning Disabilities  
1 Unit  
Formerly DSPS 50  
Non-Degree Credit  
(May be taken for Credit/No Credit only.)  
18 hours of 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. Orient students to Mt. SAC's Learning Disability Program.

#### DSPS 15 — Personalized Career Exploration for Students with Disabilities  
1 Unit  
Formerly DSPS 65  
Non-Degree Credit  
(May be taken three times for credit.)  
(May be taken for Credit/No Credit only.)  
18 hours of 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.

#### DSPS 16 — Educational and Career Options for Students with Disabilities  
1 Unit  
Formerly DSPS 66  
Non-Degree Credit  
(May be taken three times for credit.)  
(May be taken for Credit/No Credit only.)  
18 hours of 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.

#### DSPS 20 — Improving Spelling and Reading of Words  
3 Units  
Formerly DSPS 80  
Pre-Collegiate  
(May be taken for Credit/No Credit only.)  
54 hours of lecture.  
Improve 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.

#### DSPS 30 — Academic Success Strategies for Students with Disabilities  
1 Unit  
Non-Degree Credit  
(May be taken four times for credit.)  
(May be taken for Credit/No Credit only.)  
54 hours of lab.  
Advisory: Concurrent enrollment in ENGL 67 or above, or MATH 50 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.

#### DSPS 31 — Memory Strategies for Students with Disabilities  
3 Units  
(May be taken two times for credit.)  
Non-Degree Credit  
(May be taken for Credit/No Credit only.)  
54 hours of lecture.  
Advisory: Eligibility for READ 80. Student should have at least one other academic class for application of strategies.

#### DSPS 52 — Cognitive Processing Skills  
1 Unit  
(May be taken four times for credit.)  
Pre-Collegiate  
(May be taken for Credit/No Credit only.)  
54 hours of lab.  
Improves cognitive skills (attention, memory, thinking) essential for success in college course work. Secondary emphasis on perceptual skills (visual-perceptual and auditory conceptualization) when problems in such skills affect academic performance. Students who repeat this course will improve skills through further instruction and practice.

#### DSPS 53 — Understanding Language in Print  
3 Units  
Formerly DSPS 65  
Non-Degree Credit  
(May be taken four times for credit.)  
54 hours of lecture.  
Designed to improve the learning disabled student’s overall reading skills, especially in college level textbooks. Using a variety of printed materials and computer drills, student will strengthen his/her reading comprehension, textbook reading skills, and vocabulary skills. Students who repeat will continue to improve their reading skills.

#### DSPS 54 — Producing Language in Print  
3 Units  
Formerly DSPS 66  
Non-Degree Credit  
(May be taken two times for credit.)  
54 hours of lecture.  
Designed for the student with a learning disability to master quantitative concepts and develop problem-solving skills in arithmetic. Additionally, the student will acquire learning strategies allowing them to function successfully upon qualification for a mainstream math class (MATH 50 or 51). Students who repeat this course will increase their skills and proficiency through further instruction and practice.
EDUC 16 — Aspects and Issues in Teaching Service Learning 3 Units
54 hours of 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.

ELECTRONICS

ELEC 50 — Electronics Theory 2 Units
54 hours of lecture. Degree Appropriate, CSU
Advisory: Eligibility for MATH 51; ELEC 50AL, ELEC 61, ELMA 65A taken concurrently
Solid-state devices and circuits, including BJT and FET transistors, rectifier diodes, op-amps, voltage regulators, oscillators, and timers. Emphasizes configurations, classes, load lines, characteristics curves, gain, troubleshooting, and frequency response.

EDUC 10 — Introduction to Education 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
An 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, curricula and educational specialization. Course includes guidance in the selection of a future area of specialization as well as classroom observations.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 54B</td>
<td>Industrial Electronic Systems</td>
<td>2</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td></td>
<td>(May be taken two times for credit.)</td>
<td></td>
<td>(May be taken for Credit/No Credit only.)</td>
</tr>
<tr>
<td></td>
<td>36 hours of lecture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advisory: ELEC 54A taken prior; ELEC 54BL taken concurrently</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expands on circuit theory and demonstrates systems application of industrial electronics including robotics, industrial production, automation, programmable and motor controllers. Emphasis is on programmable logic controllers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| ELEC 54BL  | Industrial Electronic Systems Laboratory               | 1     | Degree Appropriate, CSU                                               |
|            |                                                       |       |                                                                      |
| Corequisite: ELEC 54B |
| Laboratory experiments in industrial control circuits, covering concepts presented in ELEC 54B. Includes troubleshooting procedures and system application of industrial electronics. Emphasizes programmable logic controllers and use of “ladder diagrams.” |

| ELEC 55    | Microwave Communications                              | 3     | Degree Appropriate                                                     |
|            |                                                       |       |                                                                      |
| Advisory: ELEC 53 taken prior and ELEC 55L taken concurrently |
| 54 hours of lab. |
| Laboratory experiments in microwave communication theory covering concepts presented in ELEC 55. Emphasizes data collection and reporting, measurement techniques, and test equipment. |

| ELEC 56    | Digital Electronics                                   | 3     | Degree Appropriate                                                     |
|            |                                                       |       |                                                                      |
| Advisory: ELEC 56L taken concurrently |
| 54 hours of lecture. |
| Combinational and 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 56L   | Digital Electronics Laboratory                        | 1     | Degree Appropriate                                                     |
|            |                                                       |       |                                                                      |
| Corequisite: ELEC 56 |
| Laboratory experiments in combinational and sequential logic circuits covering concepts presented in ELEC 56. Emphasizes breadboarding skills, data collection and reporting, and test equipment. |

| ELEC 60    | Customer Relations for the Technician                 | 1     | Degree Appropriate                                                     |
|            |                                                       |       |                                                                      |
| (May be taken two times for credit.) |
| (May be taken for Credit/No Credit only.) |
| 18 hours of 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. |

| ELEC 61    | Electronic Assembly and Fabrication                   | 2     | Degree Appropriate, CSU                                               |
|            |                                                       |       |                                                                      |
| (May be taken two times for credit.) |
| 18 hours of lecture. |
| 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     | Non-Degree Credit                                                      |
|            |                                                       |       |                                                                      |
| (May be taken two times for credit.) |
| 18 hours of lecture. |
| Advisory: ELEC 61, ELEC 61L |
| Laboratory experiments in assembly and repair on surface mount assemblies. Prepares student for PACE surface mount assembly and rework certification. Students who repeat this course will improve skills through further instruction and practice. |

| ELEC 64    | Microprocessor Systems                                | 3     | Degree Appropriate                                                     |
|            |                                                       |       |                                                                      |
| Advisory: ELEC 56 taken prior and ELEC 74L taken concurrently |
| 54 hours of lecture. |
| Emphasizes the software/hardware architecture for the typical microprocessor environment. The software instruction set and the hardware interface circuit design are covered for the microprocessor. Fundamentals and terms are covered for the personal computer (PC). |

| ELEC 64L   | Microprocessor Systems Laboratory                     | 1     | Degree Appropriate                                                     |
|            |                                                       |       |                                                                      |
| Corequisite: ELEC 74 |
| Laboratory experiments in microprocessor programming and interfacing concepts presented in the lecture portion of this class. Emphasis is on the programming and debugging of software programs and interfacing circuits. |

| ELEC 66    | Radio Telephone Communications                        | 3     | Non-Degree Credit                                                      |
|            |                                                       |       |                                                                      |
| (May be taken two times for credit.) |
| 54 hours of lecture. |
| Prepares qualified electronic technicians for the F.C.C. and/or N.A.R.T.E. commercial licenses for technicians and engineers in the communications field. Students who repeat this course will improve skills through further instruction and practice. |

| ELEC 68    | Laboratory Studies in Electronics Technology          | 1     | Degree Appropriate                                                     |
|            |                                                       |       |                                                                      |
| (May be taken two times for credit.) |
| 54 hours of lab. |
| Advisory: ELEC 58 taken prior or concurrently plus a laboratory course in the same subject field |
| Extended laboratory experience supplementary to that available in the regular program. Allows the student to pursue more advanced and complex laboratory projects and experiments. |

| ELEC 69    | Work Experience in Electronics                        | 1     | Degree Appropriate                                                     |
|            |                                                       |       |                                                                      |
| (May be taken for Credit/No Credit only.) |
| 150 hours of lab. |
| Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog |
| Advisory: ELEC 56 |
| 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. |

| ELEC 70    | Work Experience in Electronics                        | 2     | Degree Appropriate                                                     |
|            |                                                       |       |                                                                      |
| Spring Semester |
| (May be taken for Credit/No Credit only.) |
| 108 hours of lab. |
| Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog |
| Advisory: ELEC 56 |
| 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. |

| ELEC 71    | Laboratory Studies in Electronics Technology          | 2     | Non-Degree Credit                                                      |
|            |                                                       |       |                                                                      |
| (May be taken two times for credit.) |
| 108 hours of lab. |
| Advisory: ELEC 58 taken prior or concurrently plus a laboratory course in the same subject field |
| Extended laboratory experience supplementary to that available in the regular program. Allows the student to pursue more advanced and complex laboratory projects and experiments. |
Course Descriptions

**Electronics Engineering Technology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 93</td>
<td>Work Experience in Electronics</td>
<td>3</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>225 hours of lab.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advisory: ELEC 56</td>
<td></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>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>300 hours of lab.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advisory: ELEC 56</td>
<td></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>

**Electronics Cabling & Wiring Technology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECWT 50</td>
<td>Electrical Fundamentals for Cable Installations</td>
<td>4</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>54 hours of lecture.</td>
<td></td>
<td>54 hours of lab.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECWT 52</td>
<td>Fabrication Techniques for Cable Installations</td>
<td>4</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>54 hours of lecture.</td>
<td></td>
<td>54 hours of lab.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECWT 54</td>
<td>Cabling and Wiring Standards</td>
<td>4</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>54 hours of lecture.</td>
<td></td>
<td>54 hours of lab.</td>
</tr>
<tr>
<td></td>
<td>Advisory: ECWT 50, ECWT 52</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cable and wire standards of video, voice, and data wiring for home theater, computer networks, home automation, telecommunications, and other low voltage system installations. Emphasis on copper wire, coax, fiber optic, and structured cables.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Electronics Mathematics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELMA 65A</td>
<td>Mathematics of Electronics</td>
<td>2</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td></td>
<td>36 hours of lecture.</td>
<td></td>
<td>Advisory: Eligibility for MATH 51; ELEC 50A taken concurrently</td>
</tr>
<tr>
<td></td>
<td>Mathematics of DC circuits analyzing passive circuits including Ohm's Law, Kirchoff's Law, voltage dividers, current dividers, and network theorems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELMA 65B</td>
<td>Mathematics of Electronics</td>
<td>2</td>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td></td>
<td>36 hours of lecture.</td>
<td></td>
<td>Advisory: ELMA 65A taken prior; ELEC 50B taken concurrently</td>
</tr>
<tr>
<td></td>
<td>Mathematics of AC circuits analyzing passive circuits including resistance, reactance, impedance, resonance, and complex numbers (polar and rectangular).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Emergency Medical Service**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 1</td>
<td>Fundamentals for Paramedics</td>
<td>4</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>72 hours of lecture.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 10</td>
<td>Anatomy and Physiology for Paramedics</td>
<td>2</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>39 hours of lecture.</td>
<td></td>
<td>Prerequisite: Admission to Paramedic Program and EMS 1</td>
</tr>
<tr>
<td></td>
<td>Corequisite: EMS 20, EMS 30, EMS 40, EMS 50, and EMS 60. Gross anatomy and physiology of the human body, with applications to paramedic practices.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Electronics and Computer Engineering**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 20</td>
<td>Emergency Cardiac Care for Paramedics</td>
<td>1</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>20 hours of lecture.</td>
<td></td>
<td>6 hours of lab.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Admission to the Paramedic Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 30</td>
<td>Pharmacology for Paramedics</td>
<td>2</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>39 hours of lecture.</td>
<td></td>
<td>13 hours of lab.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Admission to the Paramedic Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corequisite: EMS 10, EMS 20, EMS 40, EMS 50, and EMS 60 taken concurrently. Commonly used paramedic drugs, with emphasis on dosages supplied and ordered, routes of administration, expected therapeutic outcomes and possible adverse reactions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 40</td>
<td>Cardiology for Paramedics</td>
<td>5</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>91 hours of lecture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Admission to the Paramedic Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corequisite: EMS 10, EMS 20, EMS 30, EMS 40, EMS 50, and EMS 60 taken concurrently. Familiarizes the paramedic with the normal and the diseased heart; includes assessment tools, interpretation of various dysrhythmias and appropriate paramedic interventions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 50</td>
<td>Paramedic Skills Competency</td>
<td>4.5</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>52 hours of lecture.</td>
<td></td>
<td>104 hours of lab.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Admission to the Paramedic Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corequisite: EMS 10, EMS 20, EMS 30, EMS 40, and EMS 50. Perfect the paramedic skills required for field operation as a paramedic and for certification in competency-based exams.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 60</td>
<td>EMS Theory for Paramedics</td>
<td>8.5</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>156 hours of lecture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Admission to the Paramedic Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS 70</td>
<td>Paramedic Clinical Internship</td>
<td>3.5</td>
<td>Degree Appropriate</td>
</tr>
<tr>
<td></td>
<td>(May be taken for Credit/No Credit only.)</td>
<td></td>
<td>200 hours of lab.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: EMS 60 (May have been taken previously). Application of concepts of paramedic theory and practices, with emphasis on patient assessment and utilization of paramedic skills in a hospital setting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Course Descriptions

EMS 80 — Paramedic Field Externship 8.5 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
480 hours of lab.
Prerequisite: Successful completion of Los Angeles County certifying examinations
Corequisite: EMS 70 (May have been taken previously)
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.

EMT 90 — Emergency Medical Technician I 9 Units
126 hours of lecture. Degree Appropriate
126 hours of lab.
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 hours of 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.

ENGR 1 — Introduction to Engineering 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
18 hours of 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 8 — Properties of Materials 4 Units
(May be taken for option of letter grade or Credit/No Credit.)
72 hours of lecture.
Prerequisite: CHEM 40 or 50 and PHYS 4A or 2AG
Mechanical, electrical, magnetic, optical and thermal properties of engineering materials and their relation to the materials' internal structure. Atomic structure and bonding; crystalline structures; phase and phase diagrams; metals; polymers; ceramics; composites; mechanical deformation and fracture; structural control and influence of properties; materials naming and designating systems; corrosion process; lasers; semiconductors; electronic packaging materials.

ENGR 18 — Introduction to Engineering Graphics 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.
54 hours of lab.
Fundamental engineering graphics and problem solving techniques. Skills in freehand and instrument drawing are developed and applied to the solution of problems. Orthographic, isometric and oblique drawings.

ENGR 24 — Engineering Graphics 4 Units
(CAN ENGR 2) Degree Appropriate, CSU, UC
36 hours of lecture.
108 hours of lab.
Prerequisite: ENGR 18 and eligibility for MATH 51
Advisory: COMP 15A
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.

ENGR 40 — Statics 3 Units
Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: PHYS 4A

ENGR 41 — Dynamics 3 Units
Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: ENGR 40

ENGR 42 — Mechanics of Materials 3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
Prerequisite: ENGR 40

ENGR 43 — Statics and Dynamics 4 Units
Degree Appropriate, CSU, UC
72 hours of lecture.
Prerequisite: PHYS 4A
Advisory: Eligibility for ENGL 68
Statics and dynamics of particles and rigid bodies. Statics, kinematics and kinetics of particles and rigid bodies. Applications of Newton’s Laws, work energy, and impulse-momentum methods.

ENGR 44 — Electrical Engineering 4 Units
(CAN ENGR 6) Degree Appropriate, CSU, UC
Spring Semester
54 hours of lecture.
54 hours of lab.
Prerequisite: PHYS 4B
Introduction to electrical circuit analysis; systems of units; applications of Kirchoff’s Laws and Thévenin’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.

EDT 11 — Technical Engineering Drawing I 3 Units
36 hours of lecture. Degree Appropriate, CSU
72 hours of lab.
Advisory: Eligibility for MATH 51
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.

EDT 12 — Technical Engineering Drawing II 3 Units
36 hours of lecture. Degree Appropriate, CSU
72 hours of 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.
<table>
<thead>
<tr>
<th>COURSE DESCRIPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EDT 14 — Mechanical Design – Geometric Dimensioning</strong></td>
</tr>
<tr>
<td>36 hours of lecture. Degree Appropriate, CSU</td>
</tr>
<tr>
<td>72 hours of lab.</td>
</tr>
<tr>
<td>Advisory: EDT 11, EDT 12</td>
</tr>
<tr>
<td>Use of symbols for tolerance of form and tolerance of position and drafting 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.</td>
</tr>
<tr>
<td><strong>EDT 16 — Basic CAD and Computer Applications</strong></td>
</tr>
<tr>
<td>(May be taken two times for credit.) Degree Appropriate, CSU</td>
</tr>
<tr>
<td>54 hours of lecture.</td>
</tr>
<tr>
<td>54 hours of lab.</td>
</tr>
<tr>
<td>Advisory: Eligibility for MATH 51</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>EDT 18 — Engineering CAD Applications</strong></td>
</tr>
<tr>
<td>(May be taken three times for credit.) Degree Appropriate, CSU</td>
</tr>
<tr>
<td>54 hours of lecture.</td>
</tr>
<tr>
<td>54 hours of lab.</td>
</tr>
<tr>
<td>Advisory: EDT 11, EDT 16</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>EDT 20 — Technical Descriptive Geometry</strong></td>
</tr>
<tr>
<td>Spring Semester Degree Appropriate, CSU</td>
</tr>
<tr>
<td>36 hours of lecture.</td>
</tr>
<tr>
<td>72 hours of lab.</td>
</tr>
<tr>
<td>Advisory: EDT 11</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>EDT 24 — Engineering CAD 3-D Solids and Surfaces</strong></td>
</tr>
<tr>
<td>(May be taken two times for credit.) Degree Appropriate, CSU</td>
</tr>
<tr>
<td>36 hours of lecture.</td>
</tr>
<tr>
<td>72 hours of lab.</td>
</tr>
<tr>
<td>Advisory: EDT 18</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>EDT 26 — Civil Engineering Technology and CAD</strong></td>
</tr>
<tr>
<td>36 hours of lecture. Degree Appropriate, CSU</td>
</tr>
<tr>
<td>72 hours of lab.</td>
</tr>
<tr>
<td>Advisory: EDT 11, EDT 16</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>EDT 28 — Engineering CAD 3-D Illustration/Animation</strong></td>
</tr>
<tr>
<td>(May be taken three times for credit.) Degree Appropriate, CSU</td>
</tr>
<tr>
<td>36 hours of lecture.</td>
</tr>
<tr>
<td>72 hours of lab.</td>
</tr>
<tr>
<td>Advisory: EDT 18</td>
</tr>
<tr>
<td>Advanced CAD course in three-dimensional illustration using complex entities, shading, and animation techniques. A completed video portfolio will be developed. (SolidWorks, 3DS Max, Adobe PS). Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>EDT 29 — Engineering Design Technology Work Experience</strong></td>
</tr>
<tr>
<td>(May be taken for Credit/No Credit only.) Degree Appropriate</td>
</tr>
<tr>
<td>75 hours of lab.</td>
</tr>
<tr>
<td>Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog</td>
</tr>
<tr>
<td>Provides on-the-job experience in Engineering Design Technology 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.</td>
</tr>
<tr>
<td><strong>EDT 30 — Engineering Design Technology Work Experience</strong></td>
</tr>
<tr>
<td>(May be taken four times for credit.) Degree Appropriate</td>
</tr>
<tr>
<td>150 hours of lab.</td>
</tr>
<tr>
<td>Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog.</td>
</tr>
<tr>
<td>Provides on-the-job experience in Engineering Design Technology 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.</td>
</tr>
<tr>
<td><strong>ENGL 1A — Freshman Composition</strong></td>
</tr>
<tr>
<td>(CAN ENGL 2) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>72 hours of lecture.</td>
</tr>
<tr>
<td>Prerequisite: ENGL 68 or satisfactory score on the English Placement Test</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>ENGL 1AH — Freshman Composition — Honors</strong></td>
</tr>
<tr>
<td>(CAN ENGL 2) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>72 hours of lecture.</td>
</tr>
<tr>
<td>Prerequisite: Acceptance into the Honors Program</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>ENGL 1B — English – Introduction to Literary Types</strong></td>
</tr>
<tr>
<td>(CAN ENGL 4) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>54 hours of lecture.</td>
</tr>
<tr>
<td>Prerequisite: ENGL 1A or ENGL 1AH</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>ENGL 1BH — English – Introduction to Literary Types – Honors</strong></td>
</tr>
<tr>
<td>(CAN ENGL 4) Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>54 hours of lecture.</td>
</tr>
<tr>
<td>Prerequisite: ENGL 1A or ENGL 1AH and acceptance into the Honors Program</td>
</tr>
<tr>
<td>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. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both ENGL 1B and ENGL 1BH.</td>
</tr>
<tr>
<td><strong>ENGL 1C — Critical Thinking and Writing</strong></td>
</tr>
<tr>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>72 hours of lecture.</td>
</tr>
<tr>
<td>Prerequisite: ENGL 1A or ENGL 1AH</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>
### Course Descriptions

#### ENGL 10CH — Critical Thinking and Writing — Honors 4 Units
72 hours of 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. 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 OR ENGL 8B — CAN ENGL 6
3 Units
(CAN ENGL 6) Degree Appropriate, CSU, UC
May be taken two times for credit.
May be taken for option of letter grade or Credit/No Credit.
54 hours of lecture.
Prerequisite: ENGL 1A or ENGL 1AH

#### ENGL 8A — Creative Writing – Fiction 3 Units
18 hours of lecture.
May be taken for option of letter grade or Credit/No Credit.
May be taken two times for credit.
Degree Appropriate, CSU, UC
Prerequisite: ENGL 1A or ENGL 1AH
Stresses the skills and techniques necessary for correct writing. Each student writes sentences, expository paragraphs and at least two short expository themes. Attention is given to the problems of usage and punctuation. Students who repeat this course will improve skills through further instruction and practice.

#### ENGL 65 — Grammar Review 1 Unit
18 hours of lecture.
May be taken for option of letter grade or Credit/No Credit.
Pre-Collegiate
Prerequisite: ENGL 1A
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.

#### ENGL 68 — English — Writing 3 Units
54 hours of lecture.
May be taken for option of letter grade or Credit/No Credit.
Pre-Collegiate
Prerequisite: ENGL 1A

### FAMILY & CONSUMER SCIENCES

#### FCS 41 — Life Management 3 Units
54 hours of lecture.
Degree Appropriate, CSU
Life management provides individuals with skills for understanding and using resources for effective functioning now and in the future. Explores theories of management including systems thinking and applies to the day-to-day use of one's resources including time, energy, abilities, and money. Major topics include steps in goal setting; problem solving and value clarifications; time, energy, stress, and conflict management; effect of cultural forces and future trends on goals, values, standards, and time management.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Hours</th>
<th>Prerequisite(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCS 80</td>
<td>Financial Planning</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU 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</td>
<td>54</td>
<td>Degree Appropriate, CSU Laboratory course in the same subject field and program specialization and depending on space availability. Provided 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</td>
<td>108</td>
<td>Degree Appropriate, CSU Laboratory course in the same subject field and program specialization and depending on space availability. Provided 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 83</td>
<td>Laboratory Studies in Family and Consumer Sciences</td>
<td>3</td>
<td>162</td>
<td>Degree Appropriate, CSU Laboratory course in the same subject field and program specialization and depending on space availability. Provided 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</td>
<td>216</td>
<td>Degree Appropriate, CSU Laboratory course in the same subject field and program specialization and depending on space availability. Provided 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 89</td>
<td>Work Experience in Family and Consumer Sciences</td>
<td>1</td>
<td>75</td>
<td>Degree Appropriate, CSU Provided 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>
</tr>
<tr>
<td>FCS 90</td>
<td>Work Experience in Family and Consumer Sciences</td>
<td>2</td>
<td>150</td>
<td>Degree Appropriate, CSU Provided 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>
</tr>
<tr>
<td>FCS 91</td>
<td>Work Experience in Family and Consumer Sciences</td>
<td>3</td>
<td>225</td>
<td>Degree Appropriate, CSU Provided 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>
</tr>
<tr>
<td>FCS 92</td>
<td>Work Experience in Family and Consumer Sciences</td>
<td>4</td>
<td>300</td>
<td>Degree Appropriate, CSU Provided 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>
</tr>
<tr>
<td>FASH 10</td>
<td>Clothing Fundamentals</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU 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.</td>
</tr>
<tr>
<td>FASH 12</td>
<td>Advanced Clothing</td>
<td>3</td>
<td>54</td>
<td>Degree Appropriate, CSU 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.</td>
</tr>
</tbody>
</table>
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 21</td>
<td>Basic Patternmaking</td>
<td>3</td>
<td>FASH 10</td>
<td>36</td>
<td>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.</td>
</tr>
<tr>
<td>FASH 22</td>
<td>Fashion Design By Draping</td>
<td>3</td>
<td>FASH 10</td>
<td>36</td>
<td>Three dimensional dress design through draping fabrics directly to a dress form to create original designs or to interpret fashion illustrations.</td>
</tr>
<tr>
<td>FASH 23</td>
<td>Patternmaking II</td>
<td>3</td>
<td>FASH 21</td>
<td>36</td>
<td>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.</td>
</tr>
<tr>
<td>FASH 24</td>
<td>Fashion Patternmaking by Computer</td>
<td>3</td>
<td>FASH 21</td>
<td>36</td>
<td>Study of the applications of Computer Aided Design (CAD) patternmaking and grading for the fashion industry. Exploration of drawing techniques, pattern development, flat pattern manipulation and the sizing/grading of patterns. Students who repeat this course will improve their skills through further instruction and practice.</td>
</tr>
<tr>
<td>FASH 25</td>
<td>Fashion Computer-Assisted Drawing</td>
<td>3</td>
<td>FASH 20</td>
<td>36</td>
<td>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 their skills through further instruction and practice.</td>
</tr>
<tr>
<td>FASH 26</td>
<td>Illustration for Fashion and Costume Design</td>
<td>3</td>
<td>FASH 20</td>
<td>36</td>
<td>Students will develop financial and design goals, create product concept sketches 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.</td>
</tr>
<tr>
<td>FASH 27</td>
<td>Textiles</td>
<td>3</td>
<td>FASH 20, FASH 21 or 22, AND FASH 30</td>
<td>36</td>
<td>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.</td>
</tr>
<tr>
<td>FASH 28</td>
<td>Fashion Design and Product Development I</td>
<td>3</td>
<td>FASH 15 and FASH 60</td>
<td>54</td>
<td>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.</td>
</tr>
<tr>
<td>FASH 29</td>
<td>Fashion Design and Product Development II</td>
<td>3</td>
<td>FASH 20, FASH 21 or 22, AND FASH 30</td>
<td>36</td>
<td>Construction of patterns to create original designs or to interpret fashion illustrations.</td>
</tr>
</tbody>
</table>

### Additional Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASH 31</td>
<td>Fashion and Costume Design</td>
<td>3</td>
<td>FASH 20</td>
<td>36</td>
<td>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.</td>
</tr>
<tr>
<td>FASH 32</td>
<td>Fashion and Costume Design</td>
<td>3</td>
<td>FASH 20</td>
<td>36</td>
<td>Construction of patterns to create original designs or to interpret fashion illustrations.</td>
</tr>
<tr>
<td>FASH 33</td>
<td>Fashion Design and Product Development I</td>
<td>3</td>
<td>FASH 15 and FASH 60</td>
<td>54</td>
<td>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.</td>
</tr>
<tr>
<td>FASH 34</td>
<td>Fashion Design and Product Development II</td>
<td>3</td>
<td>FASH 20, FASH 21 or 22, AND FASH 30</td>
<td>36</td>
<td>Construction of patterns to create original designs or to interpret fashion illustrations.</td>
</tr>
<tr>
<td>FASH 35</td>
<td>Field Studies</td>
<td>1</td>
<td>FASH 90</td>
<td>18</td>
<td>Pre-trip lectures on the development of the ready-to-wear industry including background information on specific designer studies, factories, and retail stores to be visited, plus travel information for the trip. Students who repeat this course will improve their skills through further instruction and practice.</td>
</tr>
<tr>
<td>FASH 36</td>
<td>Field Studies – New York</td>
<td>2</td>
<td>FASH 90</td>
<td>18</td>
<td>Pre-trip lectures on the development of the ready-to-wear industry including background information on specific designer studies, factories, and retail stores to be visited, plus travel information for the trip. Students who repeat this course will improve their skills through further instruction and practice.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Type</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>FIRE 1</td>
<td>Fire Protection Organization</td>
<td>3</td>
<td>3 Units</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>FIRE 2</td>
<td>Fire Prevention Technology</td>
<td>3</td>
<td>3 Units</td>
<td>Introduction and history of fire prevention, including codes, ID and correction of hazards, investigation, and safety education.</td>
<td></td>
</tr>
<tr>
<td>FIRE 3</td>
<td>Fire Protection Equipment and Systems</td>
<td>3</td>
<td>3 Units</td>
<td>The course includes a study of portable fire extinguishing equipment, sprinkler systems, protection systems for special hazards, fire alarm and detection systems.</td>
<td></td>
</tr>
<tr>
<td>FIRE 4</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
<td>3 Units</td>
<td>Theory and practices of fire protection, including fire protection laws, water systems and public fire protection systems; fire protection in buildings and open areas.</td>
<td></td>
</tr>
<tr>
<td>FIRE 5</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
<td>3 Units</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>FIRE 6</td>
<td>Hazardous Materials/ICS</td>
<td>3</td>
<td>3 Units</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>FIRE 7</td>
<td>Fire Fighting Tactics and Strategy</td>
<td>3</td>
<td>3 Units</td>
<td>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-fireplanning, organized approach to decision making on the fire scene, basic fire fighting tactics and strategy.</td>
<td></td>
</tr>
<tr>
<td>FIRE 8</td>
<td>Fire Company Organization and Management</td>
<td>3</td>
<td>3 Units</td>
<td>Fire department and company organization, the company officer, personnel administration and communication as it impacts fire equipment, maintenance, training, fire prevention, fire fighting, company fire fighting capabilities, records and reports.</td>
<td></td>
</tr>
<tr>
<td>FIRE 9</td>
<td>Fire Hydraulics</td>
<td>3</td>
<td>3 Units</td>
<td>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, underwater requirements for pumps.</td>
<td></td>
</tr>
<tr>
<td>FIRE 10</td>
<td>Arson and Fire Investigation</td>
<td>3</td>
<td>3 Units</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>FIRE 11</td>
<td>Fire Apparatus and Equipment</td>
<td>3</td>
<td>3 Units</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>FIRE 12</td>
<td>Wildland Fire Control</td>
<td>4</td>
<td>4 Units</td>
<td>Addresses wildland fire behavior, safety considerations, strategy, tactics, and operational differences within the wildland urban interface.</td>
<td></td>
</tr>
<tr>
<td>FIRE 20</td>
<td>Fire Instructor 1A</td>
<td>2</td>
<td>2 Units</td>
<td>40 hours of lecture. Advisory: FIRE 86 or equivalent taken prior State Board of Fire Service accredited course in fire service instruction techniques, including lesson plan development, performance goals, evaluation techniques, instructor performance goals, instructor responsibilities, the learning process, instructional aids and training records. This course applies to California Fire Service Training and Education System certifications.</td>
<td></td>
</tr>
<tr>
<td>FIRE 21</td>
<td>Fire Instructor 1B</td>
<td>2</td>
<td>2 Units</td>
<td>40 hours of lecture. Advisory: FIRE 20 or equivalent taken prior 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. A State Board of Fire Science accredited course.</td>
<td></td>
</tr>
<tr>
<td>FIRE 22</td>
<td>Fire Instructor 2A</td>
<td>2</td>
<td>2 Units</td>
<td>40 hours of lecture. Advisory: FIRE 21 or equivalent taken prior Organizational communication skills for training officers with emphasis on leadership, interpersonal relations, developing and conducting staff meetings, assertive and arguementative presentations and encouraging staff participation. A State Board of Fire Science accredited course.</td>
<td></td>
</tr>
<tr>
<td>FIRE 23</td>
<td>Fire Instructor 2B</td>
<td>2</td>
<td>2 Units</td>
<td>40 hours of lecture. Advisory: FIRE 21 or equivalent taken prior Organizational communication skills for training officers with emphasis on leadership, interpersonal relations, developing and conducting staff meetings, assertive and arguementative presentations and encouraging staff participation. A State Board of Fire Science accredited course.</td>
<td></td>
</tr>
<tr>
<td>FIRE 24</td>
<td>Fire Instructor 2C</td>
<td>2</td>
<td>2 Units</td>
<td>40 hours of lecture. Advisory: FIRE 21 or equivalent taken prior 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 instruction process, individual instructional programs. A State Board of Fire Science accredited course.</td>
<td></td>
</tr>
<tr>
<td>FIRE 30</td>
<td>Fire Management 1</td>
<td>2</td>
<td>2 Units</td>
<td>40 hours of lecture. 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>
<td></td>
</tr>
</tbody>
</table>
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 31</td>
<td>Fire Management 2A – Organizational Development and Human Relations</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Management 2B – Fire Service Financial Management</td>
<td>2</td>
<td>40 hours of lecture. Advisory: FIRE 30 Budget preparation and financial management of personnel, stations, fire equipment, and other fire department resources.</td>
</tr>
<tr>
<td>FIRE 33</td>
<td>Fire Management 2D – Master Planning in the Fire Service</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Management 2E – Personnel and Labor</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Prevention 1A</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Prevention 1B</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Prevention 1C</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Prevention 2A</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Prevention 2B</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Prevention 2C</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Command 1A</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Command 1B</td>
<td>2</td>
<td>40 hours of lecture. Advisory: FIRE 50 or equivalent taken prior Level I California Fire Service Training and Education System certified course designed for first-in incident commander and company officers. Provides incident management information on tactics, strategies, and scene management for multi-casualty incidents, hazardous materials incidents, and wildland fires.</td>
</tr>
<tr>
<td>FIRE 52</td>
<td>Fire Command 2A – Command Tactics at Major Fires</td>
<td>2</td>
<td>40 hours of lecture. Advisory: FIRE 51 Non-Degree Credit 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</td>
<td>Fire Command 2B – Management of Major Hazardous Material Incidents</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Command 2C – High-Rise Fire Tactics</td>
<td>2</td>
<td>40 hours of lecture. 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</td>
<td>Fire Command 2D – Disaster Planning and Management</td>
<td>2</td>
<td>40 hours of lecture. Advisory: FIRE 51 taken prior Level I 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>
</tr>
<tr>
<td>FIRE 56</td>
<td>Fire Command 2E – Wildland Fire Control</td>
<td>2</td>
<td>40 hours of lecture. 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 hours of lecture. Advisory: FIRE 10, FIRE 86, or equivalent taken prior Level I 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>
</tbody>
</table>
### Course Descriptions

**FIRE 61 — Fire Investigation 1B**  
2 Units  
40 hours of lecture.  
Degree Appropriate  
Advisory: FIRE 60 or equivalent taken prior 
Level I 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.

**FIRE 62 — Fire Investigation 2A — Fire Cause Determination 1**  
2 Units  
40 hours of 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.

**FIRE 63 — Fire Investigation 2B — Fire Cause Determination 2**  
2 Units  
40 hours of 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).

**FIRE 66 — Title 19/24 Workshop**  
1 Unit  
(May be taken for Credit/No Credit only.)  
Degree Appropriate  
24 hours of 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.

**FIRE 85 — Special Issues in Fire Technology**  
2 Units  
(May be taken four times for credit.)  
Degree Appropriate  
36 hours of lecture.  
Develops knowledge and techniques to enable fire 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.

**FIRE 86 — Basic Fire Academy**  
12 Units  
138 hours of lecture.  
Degree Appropriate  
382 hours of 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 33

**FIRE 88 — Explorer Fire Academy**  
2 Units  
Spring Semester  
Non-Degree Credit  
(May be taken for Credit/No Credit only.)  
22 hours of lecture.  
48 hours of 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 Marshall's Office.

**FIRE 89 — Firefighter Exam Preparation**  
.5 Unit  
Summer Semester  
Non-Degree Credit  
(May be taken for Credit/No Credit only.)  
8 hours of 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 four-hour sessions including administration of written examination.

**FIRE 91 — Fire Academy Ladders**  
1 Unit  
Summer Semester  
Non-Degree Credit  
(May be taken for Credit/No Credit only.)  
8 hours of lecture.  
32 hours of lab.  
Intensive training in ladder manipulation to prepare students for Fire Academy and physical fitness tests given by the fire departments.

**FIRE 96 — Work Experience Fire Science**  
2 Units  
(May be taken four times for credit.)  
Degree Appropriate  
150 hours of 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.

**FRCH 1 — Elementary French**  
4 Units  
(CAN FREN 2) Degree Appropriate, CSU, UC  
72 hours of lecture.  
Further development of conversational, reading and writing skills in French, with emphasis on communicative skills, expansion of vocabulary and understanding of structure. Extensive exploration and analysis of the cultures of French-speaking countries.

**FRCH 2 — Continuing Elementary French**  
4 Units  
(CAN FREN 4) Degree Appropriate, CSU, UC  
May be taken for Credit/No Credit only.  
72 hours of 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 skills, expansion of vocabulary and understanding of structure. Extensive exploration and analysis of the cultures of French-speaking countries.

**FRCH 3 — Intermediate French**  
4 Units  
(CAN FREN 8) Degree Appropriate, CSU, UC  
May be taken for option of letter grade or Credit/No Credit.  
72 hours of lecture.  
Prerequisite: FRCH 2 or equivalent  
Expansion of vocabulary and structural components. Further development of communicative proficiency with increasing emphasis on reading and writing. Extensive exposure to culture from France and other French-speaking countries.

**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 hours of 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.
Course Descriptions

FRCH 5 — Advanced French  
4 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
72 hours of 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 hours of 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 52 — Conversational French 1  
3 Units  
Degree Appropriate  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of lecture.  
Prerequisite: FRCH 1 or equivalent  
Development of intermediate French conversational skills. Emphasis on vocabulary and practical use of language. Students who repeat this course will improve skills through further practice and drill.

FRCH 55 — French Language Laboratory  
.5 Unit  
Degree Appropriate, CSU  
(May be taken for Credit/No Credit only.)  
27 hours of 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 56 — French Culture Through Cinema  
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of lecture.  
Prerequisite: Eligibility for ENGL 68  
Provides further insight into the cultures of 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.

FRCH 6 — Continuing Intermediate Conversational French  
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of 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 hours of 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.

GEOG 1 — Elements of Physical Geography  
3 Units  
Degree Appropriate, CSU, UC  
54 hours of 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 hours of 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 2 — Human Geography  
3 Units  
Degree Appropriate, CSU, UC  
54 hours of lecture.  
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.

GEOG 2H — Human Geography — Honors  
3 Units  
Degree Appropriate, CSU, UC  
54 hours of lecture.  
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, UC  
54 hours of lecture.  
Prerequisite: Eligibility for ENGL 68  
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  
Advisory: 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.

GEOG 8 — The Urban World  
3 Units  
Degree Appropriate, CSU, UC  
54 hours of lecture.  
The geographical analysis of past and current patterns of world urbanization. Emphasis will be on city origins, growth, development, and current problems.

GEOG 10 — Introduction to Geographic Information Systems  
3 Units  
Degree Appropriate, CSU, UC  
Advisory: 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites/Requirements</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 11</td>
<td>Intermediate GIS</td>
<td>3</td>
<td>Requires eligibility for MATH 51.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 10</td>
<td>Survey GIS Fundamentals</td>
<td>4</td>
<td>Requires hands-on experience using hardware/software. Emphasizes vector-based data using ArcGIS and raster-based data using software extensions.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 30</td>
<td>Geography of California</td>
<td>3</td>
<td>Requires an examination of the physical processes that shape the landscapes of California, the interaction of humans with these physical processes, and the cultural and social landscapes that have evolved as a result of this human-environment interface.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 99</td>
<td>Special Projects in Geography</td>
<td>2</td>
<td>Requires selected students recognition for their academic interest and ability 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.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 11</td>
<td>Physical Geology</td>
<td>4</td>
<td>Requires the study of the development of landscapes, formation of soils, origin of minerals and rocks, geologic work of ground water, the phenomena of earthquake, volcanoism, metamorphism, deformation of rocks and other basic concepts of geology important to man’s progress and welfare. Field trips required. This is a first course in geology for earth science and geology majors.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 12</td>
<td>Geological Geology</td>
<td>4</td>
<td>Requires the study of the development of landscapes, formation of soils, origin of minerals and rocks, geologic work of ground water, the phenomena of earthquake, volcanoism, metamorphism, deformation of rocks and other basic concepts of geology important to man’s progress and welfare. Field trips required. This is a first course in geology for earth science and geology majors.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 3</td>
<td>Paleontology, Life of the Past</td>
<td>4</td>
<td>Requires an introduction to paleontology including the history of paleontology, methods in paleontology, processes of evolution and the floral and faunal succession through geologic time.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 6</td>
<td>Earthquakes</td>
<td>1</td>
<td>Requires discussions of seismic hazards in relation to life and property. Includes the study of seismic safety legislation, socio-economic impacts and prediction of earthquakes.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 7</td>
<td>Geology of California</td>
<td>3</td>
<td>Requires 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.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 8</td>
<td>Earth Science</td>
<td>3</td>
<td>Requires 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.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 8H</td>
<td>Earth Science – Honors</td>
<td>3</td>
<td>Requires 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.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 9</td>
<td>Environmental Geology</td>
<td>3</td>
<td>Requires surveys in geology, oceanography, meteorology, and astronomy. Recommended for students needing a lab to transfer to a 4-year college/university.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 10</td>
<td>Natural Disasters</td>
<td>3</td>
<td>Requires 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 responding to natural disasters. Field trips included.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 12A</td>
<td>Natural History of California</td>
<td>3</td>
<td>Requires 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.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 12B</td>
<td>Natural History of California</td>
<td>3</td>
<td>Requires 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 GEOG 12B.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>GEOG 13</td>
<td>Evolution of the Earth</td>
<td>3</td>
<td>Requires field study of the geology of plate tectonics.</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
</tbody>
</table>
Course Descriptions

GEOL 14 — Field Geology, Sierra Nevada  
3 Units  
Degree Appropriate, CSU  
(May be taken for option of letter grade or Credit/No Credit.)  
36 hours of lecture.  
54 hours of lab.  
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 hours of lecture.  
54 hours of lab.  
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 hours of lecture.  
54 hours of lab.  
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 hours of lecture.  
54 hours of lab.  
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 hours of lecture.  
324 hours of 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  
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 contracts of a more advanced nature to ensure that proficiencies are enhanced.

GERM 1 — Elementary German  
4 Units  
Degree Appropriate, CSU, UC  
(CAN GERM 2)  
72 hours of lecture.  
Prerequisite: Eligibility for ENGL 68  
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  
Degree Appropriate, CSU, UC  
(CAN GERM 4)  
72 hours of lecture.  
Prerequisite: GERM 1 or two years of high school German or equivalent. Further development of communicative proficiency 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  
Degree Appropriate, CSU, UC  
(CAN GERM 8)  
72 hours of lecture.  
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  
Department of German  
(May be taken for Credit/No Credit.)  
27 hours of 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.

GERM 52 — Conversational German  
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of lecture.  
Prerequisite: One semester of high school or college German or equivalent experience  
Develops intermediate level German conversational skills. Emphasis is on collaborative activities and skits. Exposure to authentic Germanic culture through video. Grammar is presented in context.

GERM 53 — Conversational German  
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of lecture.  
Prerequisite: GERM 2 or three years of high school German or equivalent. Develops intermediate level German conversational skills. Emphasis on collaborative activities and skits. Exposure to authentic Germanic culture through video. Grammar is presented in context.

HIST 1 — History of the United States  
3 Units  
Degree Appropriate, CSU, UC  
54 hours of lecture.  
Prerequisite: Eligibility for ENGL 68  
A survey of the history of the United States from colonial times to the present designated 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  
Degree Appropriate, CSU, UC  
HIST 3+4 = CAN HIST SEQ C  
54 hours of lecture.  
The rise and development of civilization from the Stone Age to 1500.

HIST 3H — History of World Civilization — Honors  
3 Units  
Degree Appropriate, CSU, UC  
HIST 3H-4H = CAN HIST SEQ C  
54 hours of lecture.  
The rise and development of civilization from the Stone Age to 1500. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both HIST 3 and HIST 3H.

HIST 4 — History of World Civilization  
3 Units  
Degree Appropriate, CSU, UC  
HIST 3+4 = CAN HIST SEQ C  
54 hours of lecture.  
The rise and development of civilization from 1500 to the present.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 4H</td>
<td>History of World Civilization – Honors</td>
<td>3</td>
<td>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, including the study of American institutions and ideals and the principles of State and local government as required by Title 5 of the California Administrative Code.</td>
</tr>
<tr>
<td>HIST 7H</td>
<td>History of the United States – Honors</td>
<td>3</td>
<td>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 ideals and the Constitution of the United States as required by Title 5 of the California Administrative Code.</td>
</tr>
<tr>
<td>HIST 8</td>
<td>History of the United States</td>
<td>3</td>
<td>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 ideals and the Constitution of the United States as required by Title 5 of the California Administrative Code.</td>
</tr>
<tr>
<td>HIST 10</td>
<td>History of Asia</td>
<td>3</td>
<td>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, including the study of American institutions and ideals and the principles of State and local government as required by Title 5 of the California Administrative Code.</td>
</tr>
<tr>
<td>HIST 11</td>
<td>History of Asia</td>
<td>3</td>
<td>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, including the study of American institutions and ideals and the principles of State and local government as required by Title 5 of the California Administrative Code.</td>
</tr>
<tr>
<td>HIST 16</td>
<td>The Wild West – A History, 1800-1890</td>
<td>3</td>
<td>Survey the history of the Trans-Mississippi West to acquaint students with the historical significance, events and personalities which make up this period of American history.</td>
</tr>
<tr>
<td>HIST 19</td>
<td>History of Mexico</td>
<td>3</td>
<td>The cultural and social history of the Mexican people from pre-Colombian civilization to modern Mexico.</td>
</tr>
<tr>
<td>HIST 30</td>
<td>History of the African American</td>
<td>3</td>
<td>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 ideals and the Constitution of the United States as required by Title 5 of the California Administrative Code.</td>
</tr>
<tr>
<td>HIST 31</td>
<td>History of the African American</td>
<td>3</td>
<td>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 ideals and the Constitution of the United States as required by Title 5 of the California Administrative Code.</td>
</tr>
<tr>
<td>HIST 35</td>
<td>History of Africa</td>
<td>3</td>
<td>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 20th century. The American relationship with Africa will be considered.</td>
</tr>
<tr>
<td>HIST 36</td>
<td>Women in American History – Beyond the Stereotypes</td>
<td>3</td>
<td>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 are 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.</td>
</tr>
<tr>
<td>HIST 39</td>
<td>California History</td>
<td>3</td>
<td>The social, intellectual, economic and political development of California from earliest times to the present, against the background of Latin America, the Pacific and the United States.</td>
</tr>
</tbody>
</table>
Course Descriptions

HIST 40 — History of the Mexican American 3 Units
54 hours of 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, including the study of American institutions and ideals as required by Title 5 of the California Administrative Code.

HIST 99 — Special Projects in History 2 Units (May be taken four times for credit.) Degree Appropriate, CSU 36 hours of 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.

HISTOTECNOLOGY

HT 1 — Introduction to Histotechnology 1 Unit
18 hours of lecture. Degree Appropriate
Advisory: Eligibility for ENGL 68
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.

HT 2 — Scientific Basics for Histologic Technicians 3 Units
54 hours of lecture. Degree Appropriate
Advisory: Eligibility for ENGL 68
Defines all aspects of general laboratory issues including general laboratory protocols (GLP’s), safety, ethics, and terminology relative to the preparation of tissue samples.

HT 10 — Histology 3 Units
36 hours of lecture.
54 hours of lab.
Advisory: ANAT 35
Microscopy, image analysis; cell structure, reproduction and staining; identification of tissues, organs and special microstructures, and their detailed morphology. Involves distinguishing normal features from pathological conditions.

HT 12 — Beginning Histotechniques 5 Units
54 hours of lecture.
108 hours of lab.
Prerequisite: HT 2
Advisory: MICR 22
Practical applications and skill-building in tissue fixation, processing, embedding, sectioning, hematoxylin-eosin staining, and microorganism staining. Quality control as it relates to routine histological techniques and equipment.

HT 14 — Advanced Histotechniques 4 Units
54 hours of lecture.
54 hours of lab.
Prerequisite: HT 12
Special stains for carbohydrates, amyloid, connective tissues, muscle and nervous tissues, including silver stains. Introduction to immunostains, in situ hybridization and microwaving techniques. Provides the opportunity to gain proficiency in skills acquired in HT 12, Beginning Histotechniques.

HT 16 — Histochemistry/Immunohistochemistry 4 Units
54 hours of lecture.
54 hours of lab.
Prerequisite: HT 12
Fundamentals of enzyme and immunological reactions as they relate to tissue staining.

HT 17 — Work Experience in Histotechnology 1 Unit
(May be taken four times for credit.) Degree Appropriate
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
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.

HT 18 — Work Experience in Histotechnology 2 Units
(May be taken four times for credit.) Degree Appropriate
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
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.

HT 19 — Work Experience in Histotechnology 3 Units
(May be taken four times for credit.) Degree Appropriate
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog
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.

HOSPITALITY & RESTAURANT MANAGEMENT

HRM 51 — Introduction to Hospitality 3 Units
54 hours of lecture. Degree Appropriate, CSU
Prerequisite: Eligibility for ENGL 68
Brief review of historical development; 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.

HRM 52 — Food Safety and Sanitation 1.5 Units
27 hours of lecture. Degree Appropriate, CSU
Prerequisite: Eligibility for ENGL 68
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. Students will have the opportunity to earn the National Restaurant Association’s ServSafe Certificate upon completion of the course.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Advisory:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM 53</td>
<td>Dining Room Service Management</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Advisory: ENGL 68 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 54</td>
<td>Basic Cooking Techniques</td>
<td>3</td>
<td>36 hours of lecture. Degree Appropriate, CSU 54 hours of lab. 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 55</td>
<td>Hospitality Layout and Design</td>
<td>3</td>
<td>54 hours of 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 compliment theme and fit budgets.</td>
<td></td>
<td>HRM 51</td>
</tr>
<tr>
<td>HRM 56</td>
<td>Management of Hospitality Personnel and Operations</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Management skills course for students pursuing a career in supervision within the restaurant/hospitality industry. Applications 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 57</td>
<td>Restaurant Cost Control</td>
<td>3</td>
<td>54 hours of 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, back of the house, purchasing and receiving.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 58</td>
<td>Fast Food Service Management</td>
<td>2</td>
<td>36 hours of lecture. Degree Appropriate, CSU Corequisite: HRM 91 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 60</td>
<td>Purchasing for the Restaurant Industry</td>
<td>3</td>
<td>54 hours of 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 61</td>
<td>Menu Planning</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Advisory: HRM 51 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 62</td>
<td>Catering</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 63</td>
<td>Wines and Spirits</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 64</td>
<td>Hospitality Financial Accounting I</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Prerequisite: BUSA 11 or MATH 51 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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 65</td>
<td>Hospitality Financial Accounting II</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Prerequisite: 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 66</td>
<td>Hospitality Law</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Advisory: HRM 51 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 67</td>
<td>Introduction to Lodging</td>
<td>3</td>
<td>54 hours of lecture. Degree Appropriate, CSU Advisory: HRM 91 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>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 84</td>
<td>Hospitality Law</td>
<td>1</td>
<td>75 hours of lab. Prerequisite: Compliance 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 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 faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HRM 91</td>
<td>Work Experience in Restaurant/Hospitality</td>
<td>2</td>
<td>150 hours of lab. Prerequisite: Compliance 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 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 faculty. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Course Descriptions

INSP 17 — Legal Aspects of Construction 3 Units
(May be taken for Credit/No Credit only.) Degree Appropriate, CSU
54 hours of 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,
and lien laws.

INSP 67 — Reading Construction Drawings 3 Units
Fall Semester Degree Appropriate
54 hours of lecture.
Fundamentals of reading construction drawings as related to
architecture, construction, interior design, and related fields.

INSP 70 — Elements of Construction 3 Units
54 hours of lecture. Degree Appropriate, CSU
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.

INSP 71 — Construction Estimating 3 Units
54 hours of lecture. Degree Appropriate, CSU
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.

ID 120 — Interior Design Careers 2 Units
36 hours of lecture. Degree Appropriate, CSU
Advisory: ID 100
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 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Design theory and application. Utilization of tools, materials, and
equipment to develop technical skills applicable to interior, archi-
tectural and other related fields of design. Exploration of cultural
heritage and psychological implication of design.

HUMANITIES

HUMA 1 — The Humanities 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
An interdisciplinary study of the artistic, musical, literary and
philosophical accomplishments and achievements of women and men
in western society from the ancient Middle East to the present.
Emphasizes creating an awareness of human expression as it occurs in a
historical and philosophical context.

INTERIOR DESIGN

ID 100 — Fundamentals of Interior Design 3 Units
54 hours of 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 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Prerequisite: 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 150 — Interior Materials and Products 4 Units
72 hours of 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 150B — Interior Materials and Products 2 Units
36 hours of 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 170 — Space Planning 3 Units
Spring Semester Degree Appropriate, CSU
36 hours of lecture.
54 hours of 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
methods are emphasized in the studio.

ID 180 — History of Interior Architecture & Furnishings I 3 Units
Fall Semester Degree Appropriate, CSU
54 hours of 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 190</td>
<td>History of Interior Architecture &amp; Furnishings II</td>
<td>3</td>
<td>The historical relationship between the decorative arts, period furniture, and interior architecture is illustrated in this overview of design heritage. This course begins with the European and American histories 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.</td>
</tr>
<tr>
<td>ID 210</td>
<td>Fundamentals of Lighting</td>
<td>3</td>
<td>The fundamentals of lighting, design, theory, and application including the history and vocabulary of lighting; how light affects color and vision, incandescent and fluorescent lamps, lighting techniques for interior designers, codes, and energy-efficient lighting practices.</td>
</tr>
<tr>
<td>ID 215</td>
<td>Interior Design Studio II</td>
<td>2</td>
<td>Develop, analyze, and apply design concepts to interior environments. Universal design, “green” design, space planning, lighting systems, interior components, architectural elements, and specification writing will be integrated into research projects emphasizing problem-solving approach.</td>
</tr>
<tr>
<td>ID 230</td>
<td>Business and Professional Practice</td>
<td>3</td>
<td>The business and professional management of an interior design practice including legal issues, project management, and business practices.</td>
</tr>
<tr>
<td>ID 240A</td>
<td>Interior Design Internship Seminar</td>
<td>1</td>
<td>Students share and critique experiences, emphasizing professionalism and problem-solving techniques related to internship experience. Students who repeat this course will have additional learning experiences by being placed in a different work site.</td>
</tr>
<tr>
<td>ID 240B</td>
<td>Interior Design Internship</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>ID 240C</td>
<td>Interior Design/Kitchen &amp; Bath Internship</td>
<td>2</td>
<td>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.</td>
</tr>
<tr>
<td>ID 250</td>
<td>Codes and Specifications for Interior Design</td>
<td>2</td>
<td>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.</td>
</tr>
</tbody>
</table>
## Course Descriptions

### ITAL 5 — Advanced Italian
4 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
72 hours of lecture.  
**Prerequisite:** ITAL 4 or five years of Italian  
Emphasis is placed on increased facility to read and write 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 hours of lecture.  
**Prerequisite:** ITAL 5 or six years of Italian  
Extensive advanced reading and writing in Italian which further develops cultural insights through the study of various Italian literary types.

### ITAL 35 — Italian Language Laboratory
.5 Unit  
Degree Appropriate, CSU, UC  
(May be taken for Credit/No Credit only.)  
27 hours of 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.

### ITAL 52 — Conversational Italian
3 Units  
Degree Appropriate  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of lecture.  
**Prerequisite:** ITAL 1 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 53 — Continuing Conversational Italian
3 Units  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of 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 hours of 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 hours of lecture.  
**Prerequisite:** ITAL 3 or ITAL 53 or equivalent  
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)  
72 hours of lecture.  
**Advisory:** Eligibility for ENGL 68  
Formerly JOUR 2  
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.

#### JAPN 2 — Continuing Elementary Japanese
4 Units  
Degree Appropriate, CSU, UC  
(CAN JAPN 4)  
72 hours of lecture.  
**Prerequisite:** JAPN 1 or two years high school Japanese  
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)  
72 hours of lecture.  
**Prerequisite:** JAPN 2 or equivalent  
Continued development of Kanji (50 or more characters) with 60 additional readings. Continued development of writing ability emphasizing development of thought through Kanji, Hiragana and Katakana. Additional development of cultural application of Japanese.

#### JAPN 4 — Continuing Intermediate Japanese
4 Units  
Degree Appropriate, CSU, UC  
(CAN JAPN 10)  
72 hours of lecture.  
**Prerequisite:** JAPN 3 or equivalent  

#### JAPN 5 — Advanced Japanese
4 Units  
Degree Appropriate, CSU, UC  
(CAN JAPN 13)  
72 hours of lecture.  
**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 — Conversational Japanese
3 Units  
Degree Appropriate, CSU, UC  
(May be taken four times for credit.)  
27 hours of lab.  
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 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 hours of lecture.  
**Prerequisite:** JAPN 2 or equivalent  

#### JOUR 100 — Mass Media and Society
3 Units  
Degree Appropriate, CSU, UC  
Formerly JOUR 2  
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
Formerly JOUR 1A
Degree Appropriate, CSU, UC
(CAN JOUR 2)
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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
Formerly JOUR 20B
Degree Appropriate, CSU, UC
Spring Semester
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
Prerequisite: JOUR 101 or JOUR 1A
Development of intermediate news reporting techniques combined with the composition of complex journalistic writing forms.

JOUR 103 — Working on the Newspaper 3 Units
Formerly JOUR 3
Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
18 hours of lecture.
108 hours of 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
Formerly JOUR 4
Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.
54 hours of 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
Formerly JOUR 5
Degree Appropriate
(May be taken four times for credit.)
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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
Formerly JOUR 6
Degree Appropriate, CSU
Fall Semester
(May be taken two times for credit.)
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
36 hours of lab.
Corequisite: COMP 60 or COMP 62 (May have been taken previously)
Photojournalism 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
Formerly JOUR 7
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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
Formerly JOUR 8
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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 media, and society will be explored.

JOUR 109 — Public Relations Internship 3 Units
Formerly JOUR 9
Degree Appropriate
(May be taken two times for credit.)
(May be taken for option of letter grade or Credit/No Credit.)
225 hours of lab.
Advisory: JOUR 108 or JOUR 8
Field work in public 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
Formerly JOUR 24
Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.
54 hours of lab.
Prerequisite: JOUR 101 or JOUR 1A
Production 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
Formerly JOUR 25
Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
Prerequisite: JOUR 1A or JOUR 101
Intensive news gathering and writing for radio and television. Newscast 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
Formerly JOUR 83
Non-Degree Credit
(May be taken for option of letter grade or Credit/No Credit.)
(May be taken for Credit/No Credit only.)
225 hours of 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.
### Course Descriptions

#### LEADERSHIP

- **LEAD 55 — Exploring Leadership** 3 Units  
  54 hours of lecture. 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 48 — Basic Math Skills Review** 3 Units  
  (May be taken three times for credit.)  
  (May be taken for Credit/No Credit only.)  
  54 hours of lecture.  
  24 hours of lab.  
  Essential math fundamentals: multiplication tables, adding, subtracting, multiplying, and dividing whole numbers and fractions. Emphasis on learning strategies such as organization and math anxiety. Successful completers of this course are eligible for LEARN 49. Students who repeat this course will improve skills through further instruction and practice.

- **LEARN 49 — Math Skills Review** 3 Units  
  (May be taken three times for credit.)  
  (May be taken for Credit/No Credit only.)  
  54 hours of lecture.  
  24 hours of lab.  
  Prerequisite: LEARN 48 or passing score on current placement test. Improves knowledge of basic math. Includes operations and applied problems in whole numbers, fractions, decimals, percentages, and proportions. Covers math study strategies such as overcoming math anxiety. Students who repeat this course will improve skills through further instruction and practice.

- **LERN 61 — Skills Development Laboratory** 1 Unit  
  (May be taken two times for credit.)  
  54 hours of lab.  
  Offers individualized material in the following subjects: reading comprehension, reading acceleration, vocabulary, spelling, elementary math, algebra review, English grammar, study techniques (note-taking, test-preparation, test-taking). Students may register for one unit through the first half of the term. One unit requires a total expenditure of 48 hours in class. Students who repeat will achieve further improvement in the skills previously tested or work on the development of other skills.

- **LERN 62 — Skills Development Laboratory** 2 Units  
  (May be taken for Credit/No Credit only.)  
  108 hours of lab.  
  Offers individualized material in the following subjects: reading comprehension, reading acceleration, vocabulary, spelling, elementary math, algebra review, English grammar, study techniques (note-taking, test-preparation, test-taking). Students may register for two units through the first half of the term. Two units require a total expenditure of 96 hours in class. Students who repeat will achieve further improvement in the skills previously tested or work on the development of other skills.

- **LERN 81 — Improving Writing Skills** 3 Units  
  (May be taken three times for credit.)  
  (May be taken for Credit/No Credit only.)  
  54 hours of lecture.  
  24 hours of lab.  
  Offers assistance to students who wish to improve prewriting, writing, editing, and revising skills. Provides instruction in concept and structure of sentences, paragraphs, and essay; emphasizes development in writing through the integration of grammar and critical thinking. Students who repeat this course will improve skills through further instruction and practice.

#### LIBRARY & INSTRUCTIONAL MEDIA

- **LIBR 1 — Information Resources and Research Methods** 3 Units  
  (May be taken two times for credit.)  
  Degree Appropriate, CSU, UC  
  54 hours of 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 1A — Introduction to Library Research** 1 Unit  
  (May be taken two times for credit.)  
  Degree Appropriate, CSU  
  18 hours of 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.

#### LITERATURE

- **LIT 1 — Early American Literature** 3 Units  
  (CAN ENGL14)  
  Degree Appropriate, CSU, UC  
  54 hours of lecture.  
  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  
  54 hours of lecture.  
  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 6A — Survey of English Literature** 3 Units  
  54 hours of 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  
  (May be taken for option of letter grade or Credit/No Credit.)  
  54 hours of lecture.  
  Prerequisite: ENGL 1A  
  A chronological study of major works from the Romantic Era through the Victorian and Modern periods to contemporary texts.

- **LIT 10 — Survey of Shakespeare** 3 Units  
  Degree Appropriate, CSU, UC  
  (May be taken for option of letter grade or Credit/No Credit.)  
  54 hours of lecture.  
  Prerequisite: ENGL 1A  
  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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<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 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 34</td>
<td>Women Writers</td>
<td>3</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of lecture.</td>
</tr>
<tr>
<td>LIT 35</td>
<td>Science Fiction and Fantasy Survey</td>
<td>3</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of lecture.</td>
</tr>
<tr>
<td>LIT 36</td>
<td>Introduction to Mythology</td>
<td>3</td>
<td>A survey of major myths, including creation, fertility, and hero myths. Explores theories and approaches to these archetypal stories and the ways that they reflect and shape culture. Emphasis is on classical myths, but myths from around the world may be included.</td>
</tr>
<tr>
<td>LIT 40</td>
<td>Children’s Literature</td>
<td>3</td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of lecture.</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 the Old Testament.</td>
</tr>
<tr>
<td>MFG 11</td>
<td>Manufacturing Processes I</td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU 18 hours of lecture.</td>
</tr>
<tr>
<td>MFG 12</td>
<td>Manufacturing Processes II</td>
<td>2</td>
<td>(May be taken two times for credit.) Degree Appropriate, CSU 18 hours of lecture.</td>
</tr>
<tr>
<td>MFG 15</td>
<td>AutoCAD 2D</td>
<td>2</td>
<td>(May be taken four times for credit.) Degree Appropriate, CSU 18 hours of lecture.</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 hours of lecture.
54 hours of 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 hours of lecture.
54 hours of 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 hours of lecture.
54 hours of lab.
Advisory: MFG 19 or MFG 27 taken previously
Advanced instruction in concepts, practice, and development of feature-based solid modeling using 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 hours of lecture.
54 hours of 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 38 — MasterCAM I 2 Units
(May be taken four times for credit.) Degree Appropriate
18 hours of lecture.
54 hours of 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 38B — Advanced MasterCAM 2 Units
(May be taken four times for credit.) Degree Appropriate
18 hours of lecture.
54 hours of lab.
Advisory: MFG 38
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 38C — MasterCAM Solids 2 Units
(May be taken four times for credit.) Degree Appropriate
18 hours of lecture.
54 hours of lab.
Advisory: MFG 38B
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.

MFG 39 — SurfCAM I 2 Units
(May be taken four times for credit.) Degree Appropriate
18 hours of lecture.
54 hours of lab.
Advisory: MFG 11, MFG 85
SurfCAM software used to create part geometry from project drawings for two-axis milling and turning parts. Tool paths will be added and the completed file will be post-processed and downloaded to CNC machine. Students who repeat this course will improve their skills through further instruction and practice.

MFG 39B — SurfCAM II 2 Units
(May be taken four times for credit.) Degree Appropriate
18 hours of lecture.
54 hours of 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 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.

MFG 58 — Blueprint Reading for Manufacturing 2 Units
(May be taken two times for credit.) Degree Appropriate
36 hours of 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.

MATH 10 — Math Enhancement 0 Unit
(May be taken four times for credit.) Pre-Collegiate
18 hours of activity.
Linked with a corresponding math lecture section, this course provides hands-on activities and mathematical applications designed to enhance student success and abilities in the linked course. Supplemental learning activities such as computer projects, drill and practice, study skills development, group work, and student presentations.

MATH 50 — Pre-Algebra 3 Units
54 hours of 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 skills, thinking skills and problem-solving skills are balanced to build proficiency and mastery.
MATH 50L — Pre-Algebra Laboratory 0 Unit
(May be taken four times for credit.) Pre-Collegiate
108 hours of lab. Corequisite: MATH 50
Open entry-open exit laboratory for students enrolled in pre-algebra. Individual and group assistance and instructional support, including review, drill and practice, and assistance with assigned laboratory projects in the Math Activities Resource Center (M.A.R.C.) Students who repeat this course will improve skills through further instruction and practice.

MATH 51 — Elementary Algebra 4 Units
72 hours of lecture. Degree Appropriate
Prerequisite: MATH 50 or qualifying score on current department placement test
Basic algebra, equivalent to first year high school algebra. Includes operations with signed numbers and algebraic expressions, linear equations and inequalities; polynomial operations and factoring, rational expressions and equations, Cartesian Coordinate System, slope/graphing/equations of lines, systems of linear equations, ratio/proportion, formulas and variation, applications, radicals and exponents, quadratic equations.

MATH 51A — Elementary Algebra – First Half 3 Units
54 hours of 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 hours of 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 52 — Algebra with Applications I 4 Units
72 hours of lecture. Degree Appropriate
Prerequisite: MATH 50; OR passing score on current department placement test
First course in an alternative sequence equivalent to Beginning and Intermediate Algebra, featuring practical applications with a minimum of emphasis on review topics. Includes solving linear equations in one and two variables; applications; graphing linear equations in two variables; finding the equations of lines; solving linear and absolute value inequalities; exponents; operations with polynomials and rational expressions; factoring techniques and solving polynomial equations; and solving systems of linear equations and inequalities. A student must complete both MATH 52 and MATH 72 to have taken the equivalent of MATH 51, and both in combination will satisfy the requirement for an A.S. or A.A. degree.

MATH 59 — Fundamental Applied Mathematics 3 Units
54 hours of lecture. Degree Appropriate
Prerequisite: MATH 50 or qualifying score on current department placement test
Develops practical problem-solving skills utilizing ratio, proportion, unit conversion, percent, algebraic formulas, exponents, functions, variation, linear equations in one and two variables, linear and non-linear graphs, systems of equations, statistics, and geometry. Especially appropriate for students in vocational programs leading to the Associate in Science degree.

MATH 61 — Plane Geometry 3 Units
54 hours of lecture. Degree Appropriate
Prerequisite: MATH 51 or MATH 51B or MATH 52 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 hours of lecture. Degree Appropriate
Prerequisite: MATH 51 or MATH 51B 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 hours of lecture. Degree Appropriate
Prerequisite: MATH 51 or MATH 51B or MATH 72 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; sequences and series; the binomial theorem.

MATH 71B — Intermediate Algebra – Second Half 3 Units
54 hours of lecture. Degree Appropriate
Prerequisite: MATH 71A
Quadratic equations and graphs; exponents, radicals and logarithms; conic sections. Students must complete both MATH 71A AND MATH 71B to have taken the equivalent of intermediate algebra.

MATH 72 — Algebra with Applications II 5 Units
90 hours of lecture. Degree Appropriate
Prerequisite: MATH 52
Limited to students who have successfully completed MATH 52. Features practical applications of complex fractions; solving rational equations and inequalities; exponents and radicals; solving quadratic equations and inequalities; complex numbers; the study of linear functions, quadratic functions, inverse functions, exponential and logarithmic functions, and the algebra of functions; solving systems of non-linear equations and inequalities; conics; sequences and series; and applications involving rational and quadratic equations, variation and linear, quadratic, exponential and logarithmic functions. A student must complete both MATH 52 and MATH 72 to have taken the equivalent of MATH 51, and both in combination will satisfy the requirement for an A.S. or A.A. degree.

MATH 99 — Special Projects in Mathematics 2 Units
18 hours of lecture. Degree Appropriate
Prerequisite: MATH 50 or MATH 51 or MATH 51B or MATH 52 or qualifying score on current department placement test
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 99 — Special Projects in Mathematics 2 Units
18 hours of lecture. Degree Appropriate
Prerequisite: MATH 50 or MATH 51 or MATH 51B or MATH 52 or qualifying score on current department placement test
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.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 100</td>
<td>Survey of College Mathematics</td>
<td>3</td>
<td>(CAN MATH 2) Degree Appropriate, CSU, UC 54 hours of 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.</td>
</tr>
<tr>
<td>MATH 110</td>
<td>Elementary Statistics</td>
<td>3</td>
<td>(CAN STAT 2) Degree Appropriate, CSU, UC 54 hours of 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.</td>
</tr>
<tr>
<td>MATH 110H</td>
<td>Elementary Statistics – Honors</td>
<td>3</td>
<td>(CAN STAT 2) Degree Appropriate, CSU, UC 54 hours of 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 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. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both MATH 110 and MATH 110H.</td>
</tr>
<tr>
<td>MATH 120</td>
<td>Finite Mathematics</td>
<td>3</td>
<td>(CAN MATH12) Degree Appropriate, CSU, UC Fall Semester 54 hours of 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.</td>
</tr>
<tr>
<td>MATH 130</td>
<td>College Algebra</td>
<td>3</td>
<td>(CAN MATH10) Degree Appropriate, CSU, UC 54 hours of lecture. Prerequisite: MATH 71 or MATH 71B or MATH 72 or qualifying score on current department placement test</td>
</tr>
<tr>
<td>MATH 140</td>
<td>Calculus for Business</td>
<td>4</td>
<td>(CAN MATH34) Degree Appropriate, CSU, UC 72 hours of lecture. Prerequisite: MATH 130 or MATH 160 or qualifying score on current department placement test Algebraic, logarithmic, and exponential functions; limits; differentiation with applications; various techniques of integration with applications; differential equations; multi variable calculus. Credit not given to persons with credit in MATH 180 or equivalent.</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Trigonometry</td>
<td>3</td>
<td>(CAN MATH 8) Degree Appropriate, CSU 54 hours of lecture. Prerequisite: (MATH 71 or MATH 71B or MATH 72 or qualifying score on current department placement test) Trigonometry 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.</td>
</tr>
<tr>
<td>MATH 160</td>
<td>Precalculus Mathematics</td>
<td>4</td>
<td>(CAN MATH16) Degree Appropriate, CSU, UC 72 hours of lecture. Prerequisite: MATH 150 OR (high school trigonometry, “C” or better, or passing score on current geometry competency test) Real-valued functions, including algebraic, trigonometric, exponential and logarithmic functions. Also includes proofs, inequalities, introductory analytical geometry, series, sequences, and vectors.</td>
</tr>
<tr>
<td>MATH 180</td>
<td>Calculus and Analytic Geometry</td>
<td>4</td>
<td>(CAN MATH18) Degree Appropriate, CSU, UC 72 hours of lecture. 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, numerical integration, and calculus with exponential, logarithmic, and other transcendental functions.</td>
</tr>
<tr>
<td>MATH 181</td>
<td>Calculus and Analytic Geometry</td>
<td>5</td>
<td>(CAN MATH20) Degree Appropriate, CSU, UC 90 hours of lecture. Prerequisite: MATH 180 Applications of integration, techniques of integration; undetermined forms and improper integrals; infinite series; plane curves and parametric equations; vectors in two and three space and their applications.</td>
</tr>
<tr>
<td>MATH 210</td>
<td>Concepts of Elementary Mathematics</td>
<td>3</td>
<td>(CAN MATH 4) Degree Appropriate, CSU 54 hours of lecture. 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.</td>
</tr>
<tr>
<td>MATH 245</td>
<td>A Transition to Advanced Mathematics</td>
<td>3</td>
<td>(CAN MATH20) Degree Appropriate, CSU, UC 54 hours of lecture. Prerequisite: MATH 181 A transition to the rigor 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.</td>
</tr>
<tr>
<td>MATH 280</td>
<td>Calculus and Analytic Geometry</td>
<td>4</td>
<td>(CAN MATH24) Degree Appropriate, CSU, UC 90 hours of 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</td>
</tr>
</tbody>
</table>
MEDI 90 — Medical Terminology  3 Units  
54 hours of lecture.  Degree Appropriate, CSU  
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 40 — Introduction to Interviewing and Counseling  3 Units  
54 hours of 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 MENT 40 and PSYC 40.

MENT 56 — Medical-Surgical Nursing for Psychiatric Technicians  9 Units  
162 hours of lecture.  Degree Appropriate  
Prerequisite: Admission to the Psychiatric Technician Program  
Corequisite: MENT 56L  
Holistic approach to assessment and intervention in the care of the medical-surgical patient.  Examines physiological modes of rest and exercise, regulation, circulation, ventilation and the sensory system; medical-surgical nursing; care of the dying patient, cardiovascular problems; calculations of drug dosage and administration of oral and topical medications; study of anatomy and physiology of the human body.

MENT 56L — Clinical Experience  4 Units  
(May be taken for Credit/No Credit only.)  Degree Appropriate  
216 hours of lab.  Corequisite: MENT 56  
Development of medical-surgical nursing skills.  Application and assessment, intervention, evaluation of nursing treatment 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 neonoplasms and cardiovascular problems.  Administration of medication.

MENT 58 — Advanced Medical-Surgical Nursing for Psychiatric Technicians  2 Units  
36 hours of lecture.  Degree Appropriate  
Prerequisite: MENT 56  
Corequisite: MENT 58L  
Examines disease processes which affect the body systems, related terminology, causes and symptoms, required medical and nursing care, and diet therapy.

MENT 58L — Advanced Medical-Surgical Nursing for Psychiatric Technicians Clinical  1.5 Units  
(May be taken for Credit/No Credit only.)  Degree Appropriate  
90 hours of lab.  Corequisite: MENT 58  
Application of nursing skills to patients with medical/surgical disorders.  Administration of medications.

MENT 70 — Introduction to Psychiatric Technology  1.5 Units  
27 hours of 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.

MENT 70L — Introduction to Psychiatric Technology Clinical  2 Units  
(May be taken for Credit/No Credit only.)  Degree Appropriate  
108 hours of 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.

MENT 71 — Pharmacology for Psychiatric Technicians  2 Units  
36 hours of lecture.  Degree Appropriate  
Advisory: MENT 56  
Study of drugs in current use, their physical properties; absorption, actions, both therapeutic and toxic; contraindications; standards; modes of administration; and mathematics for medication.

MENT 72 — Nursing Care of the Developmentally Disabled Person  7 Units  
126 hours of 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.

MENT 72L — Nursing Care of the Developmentally Disabled Person — Clinical  5 Units  
(May be taken for Credit/No Credit only.)  Degree Appropriate  
288 hours of lab.  Corequisite: MENT 72  
Application of skills needed to teach, train and provide care for the developmentally disabled person.  Administration of medication.

MENT 73T — Psychiatric Nursing for Psychiatric Technicians  6 Units  
108 hours of lecture.  Degree Appropriate  
Corequisite: MENT 73L  
Clinical instruction in the treatment of mental disabilities and substance abuse.

MENT 73L — Psychiatric Nursing for Psychiatric Technicians Clinical  5 Units  
(May be taken for Credit/No Credit only.)  Degree Appropriate  
288 hours of lab.  Corequisite: MENT 73T  
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.

MENT 82 — Work Experience in Mental Health Technology  2 Units  
(May be taken for Credit/No Credit only.)  Degree Appropriate  
150 hours of 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.

METEOROLOGY

METO 3 — Weather and the Atmospheric Environment  3 Units  
54 hours of lecture.  Degree Appropriate, CSU, UC  
An introduction to the atmosphere.  Processes that influence weather and climate: seasonality, structure of the atmosphere, atmospheric stability, severe weather (hurricanes, tornadoes, thunderstorms), climate change, and the causes and effects of air pollution.  Students will use a variety of weather instruments, and the course may include either field work or field trips.

METO 3L — Weather and Atmospheric Environment Laboratory  1 Unit  
54 hours of lab.  Degree Appropriate, CSU, UC  
Corequisite: METO 3 (May have been taken previously)  
Laboratory topics paralleling the course content of METO 3.
MICROBIOLOGY

MICR 1 — Principles of Microbiology 5 Units
(CAN BIO14) Degree Appropriate, CSU, UC
54 hours of lecture. 108 hours of lab.
Prerequisite: CHEM 10 or CHEM 40. One year of college chemistry is recommended for all transfer majors. CHEM 50/51 sequence is preferred for biology and most pre-health professional majors.
Fundamental concepts of microbiology with emphasis on bacteria. Survey of microbial classification, morphology, physiology and genetics; beneficial and pathological aspects; growth and control of microbes; virology, immunology, and host-microbe interactions. Important infectious diseases of humans are surveyed. Laboratory exercises examine microbial morphology, physiology and genetics, as well as environmental influences of microorganisms. Laboratory techniques include culturing, examining, and identifying microorganisms.

MICR 22 — Microbiology 4 Units
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of 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. Covers microbial classification, physiology and genetics; host-parasite interaction; control of disease-causing agents; public health microbiology; immune response and immune disorders. Important diseases of humans and other animals are surveyed. Laboratory exercises include experiments and observation on the morphology, physiology, and control of microorganisms.

MUSIC

MUS 1 — Concert Music 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for Credit/No Credit only)
18 hours of lecture.
A concert experience in listening to recitals, media presentations, musical demonstrations and lectures given by faculty, guest artists, and students. Attendance at and reports on additional live concerts may be required. Students who repeat this course will improve skills through further instruction and practice. Course open to all students.

MUS 2 — Music Theory 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Co-requisite: MUS 5A
Required for music majors. Reviews and examines the materials of musical notation, rhythm, tonality and modality, melody and scale structure, and music terminology.

MUS 3A — Harmony 3 Units
Spring Semester
54 hours of lecture.
Prerequisite: MUS 2, MUS 5A
Corequisite: MUS 5B
An examination of the harmonic style of composers of the 17th and 18th centuries, including diatonic harmony and melody, rhythm and structure. Original four-part compositions will be written.

MUS 3B — Harmony 3 Units
Fall Semester
54 hours of lecture.
Prerequisite: MUS 3A, MUS 5B
Corequisite: MUS 6A
A continuation of the examination of homophonic style of composers of the 17th through mid-19th centuries. Topics will include study of modulation, seventh chords, secondary dominants, and irregular resolutions of chords. Original four-part compositions will be written.

MUS 3C — Harmony 3 Units
Spring Semester
54 hours of lecture.
Prerequisite: MUS 3B, MUS 6A
Corequisite: MUS 6B
A further examination of homophonic style of composers of the late 18th through early 20th century. Topics will include study of non-dominant chords, chromatically altered chords, and Neapolitan and Augmented Sixth chords. Original four-part compositions will be written.

MUS 5A — Musicianship — Ear Training and Sight Singing 1 Unit
18 hours of lecture. Degree Appropriate, CSU, UC
18 hours of lab.
Corequisite: MUS 2
Emphasizes sight singing and the aural perception of 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 hours of lecture. Degree Appropriate, CSU, UC
18 hours of lab.
Prerequisite: MUS 2, MUS 5A
Corequisite: MUS 3A
Provides further ear training and sight singing experience including two-part harmonic dictation. 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
Fall Semester
36 hours of lecture.
Degree Appropriate, CSU, UC
18 hours of lab.
Prerequisite: MUS 3A
Corequisite: MUS 3B
Diatonic chord progressions studied in MUS 3A are used for dictation exercises in this course. Clef dictation, keyboard harmony, and sight singing will also be included. 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 hours of lecture.
Degree Appropriate, CSU, UC
18 hours of lab.
Prerequisite: MUS 3B, MUS 6A
Corequisite: MUS 3C
Chord progression studied in MUS 3B and 3C are used for dictation exercises. Keyboard harmony and sight singing will also be included. 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 hours of 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
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.
36 hours of lab.
Advisory: Eligibility for ENGL 68
Develops an understanding of the principles of musical acoustics and sound generation. Teaches basic techniques for using audio equipment to electronically generate sound. Students who repeat this course will improve skills through further instruction and practice.

MUS 11A — Music Literature Survey 3 Units
Fall Semester
Degree Appropriate, CSU, UC
54 hours of lecture.
A survey of western music from the Medieval period through the 18th century including examples of music from several non-western cultures. Lectures are augmented by recordings and other support media pertinent to the culture/period being studied. Attending at least one live concert is required.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 11B</td>
<td>Music Literature Survey</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 12</td>
<td>History of Jazz</td>
<td>3</td>
<td>A survey of jazz as a significant American art form from its roots in African and Creole music to the present. Major styles, leading performers, significant compositions and recordings, and the social, economic, and cultural contexts of the music will be stressed.</td>
</tr>
<tr>
<td>MUS 13</td>
<td>Introduction to Music Appreciation</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 14A</td>
<td>World Music</td>
<td>3</td>
<td>Examines the dominant musical cultures of the world within Africa, the Americas, and Asia and compares these to Western popular music. Identities vocal and instrumental genres within selected cultures and examines the harmonic, melodic, and rhythmic characteristics of each style. Lectures, films, recordings, and media presentations will assist the student in exploring the ways in which music is used around the world for aesthetic, social, and spiritual purposes.</td>
</tr>
<tr>
<td>MUS 14B</td>
<td>American Folk Music</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 15</td>
<td>Rock Music History and Appreciation</td>
<td>3</td>
<td>Historical survey of rock music from its beginnings in the early 50's to the present. Rhythm &amp; 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.</td>
</tr>
<tr>
<td>MUS 16</td>
<td>Individual Instruction</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 17A</td>
<td>Elementary Class Piano</td>
<td>1</td>
<td>Group and individual instruction toward mastering the basic skills required for a solid singing technique for popular, theatrical, and classical music. Studies of musicianship will concentrate on individual vocal problems. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>MUS 17B</td>
<td>Intermediate Class Piano</td>
<td>1</td>
<td>Group and individual instruction toward mastering the basic skills required for a solid singing technique for popular, theatrical, and classical music. Studies of musicianship will concentrate on individual vocal problems. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>MUS 18</td>
<td>Advanced Class Piano</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 19</td>
<td>Class Organ</td>
<td>1</td>
<td>Group and individual instruction in registration, manual and pedal technique, interpretation of standard organ literature, and organ MIDI technique. Special projects will be given for prospective church organists. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>MUS 20A</td>
<td>Elementary Class Voice</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 20B</td>
<td>Intermediate Class Voice</td>
<td>1</td>
<td>Group and individual instruction toward mastering the basic skills required for a solid singing technique for popular, theatrical, and classical music. Studies of musicianship will concentrate on individual vocal problems. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>MUS 21</td>
<td>Advanced Class Voice</td>
<td>1</td>
<td>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.</td>
</tr>
</tbody>
</table>
### Course Descriptions

**MUS 22 — Conducting** 1 Unit  
(May be taken for option of letter grade or Credit/No Credit.)  
18 hours of lecture.  
18 hours of 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 for option of letter grade or Credit/No Credit.)  
18 hours of lecture.  
18 hours of 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 for option of letter grade or Credit/No Credit.)  
18 hours of lecture.  
18 hours of lab.  
Advisory: MUS 23A  
Techniques for reading and playing music arranged for the solo guitar. Students must furnish their own acoustic guitars. 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 hours of lecture.  
18 hours of lab.  
Advisory: MUS 23B  
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 guitars. 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 hours of lecture.  
18 hours of 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.  

**MUS 25B — Jazz Improvisation** 1 Unit  
(May be taken for option of letter grade or Credit/No Credit.)  
18 hours of lecture.  
18 hours of lab.  
Advisory: MUS 2 or MUS 7 and/or audition by professor AND MUS 25A or equivalent experience  
Styles and techniques of improvisation. Each student must furnish his/her own instrument and be able to perform individually and with the class. Augments and supplements MUS 25A. Students who repeat this course will improve skills through further instruction and practice.  

**MUS 27 — Chamber Winds** 2 Units  
(May be taken for option of letter grade or Credit/No Credit.)  
108 hours of lab.  
Corequisite: Admission by audition; MUS 49  
This select ensemble of wood instruments will study and perform small ensemble music by major composers. Includes brass and woodwind quintets and ensembles for families of instruments. Attendance is required at all public performances. Students who repeat this course will improve skills through further instruction and practice.  

**MUS 28 — Collegiate Chorale** 1 Unit  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of lab.  
Open to all students without an audition. Choral music of all genres with an emphasis on strengthening choral skills, including sight singing, tone, blend, balance and good vocal technique. Covers choral tone of the Renaissance to correct use of the microphone when singing pop or vocal jazz. Several guest conductors from local universities will provide clinics. Students who repeat this course will improve skills through further instruction and practice.  

**MUS 29 — Choral Workshop** 1 Unit  
Summer Semester  
Degree Appropriate, CSU, UC  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of lab.  
This is an auditioned ensemble in which students will learn and develop a variety of choral repertoire. Students who repeat this course will improve their skills through further instruction and practice.  

**MUS 30 — Collegiate Chorale** 1 Unit  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of lab.  
A non-auditioned mixed choral ensemble open to all students. A variety of mixed choral 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. Students who repeat this course will improve skills through further instruction and practice.  

**MUS 31 — Concert Choir** 2 Units  
(May be taken for option of letter grade or Credit/No Credit.)  
108 hours of lab.  
Prerequisite: Admission by audition the first week of class  
A mixed choral ensemble in which students perform a variety of major choral works. Classical songs are rehearsed in class and performed for a public audience. Sight singing skills and proper vocal technique are emphasized. Voice placement auditions are held the first week of class. Attendance at all performances is required. Students who repeat this course will improve skills through further instruction and practice.  

**MUS 32 — Masterworks Chorale** 1 Unit  
(May be taken for option of letter grade or Credit/No Credit.)  
54 hours of lab.  
Prerequisite: Admission by audition during the first week of class  
This Soprano, Alto, Tenor, Bass choir will perform major choral works ranging from the Baroque era to the 20th century. In addition to preparation and performance of quality choral literature from all genres, time will be spent on vocal development and music theory. Students who repeat this course will improve their skills through further instruction, practice, and knowledge of varied repertoire.  

**MUS 33 — Women's Vocal Ensemble** 2 Units  
(May be taken for option of letter grade or Credit/No Credit.)  
108 hours of lab.  
Prerequisite: Admission by audition during the first week of class  
This women's group will study and perform 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 34 — Concert and Community Band** 2 Units  
(May be taken for option of letter grade or Credit/No Credit.)  
108 hours of lab.  
Advisory: Previous band experience  
Study and performance of standard and new band literature. Experience will be given to capable student directors, soloists, arrangers and composers. Attendance is required at all public performances. Students who repeat this course will improve skills through further instruction and practice.  

**MUS 35 — Ensemble** 1 Unit  
(May be taken for option of letter grade or Credit/No Credit.)  
18 hours of lecture.  
18 hours of lab.  
Prerequisite: Ability to read music or admission by audition  
The study and performance of music written for small ensembles. Students who repeat this course will improve skills through further instruction and practice.
MUS 39 — Laboratory Band 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 hours of lab.
Prerequisite: Admission by audition
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.

MUS 40 — Pep Band 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU, UC
54 hours of lab.
Prerequisite: Admission by audition
Study and performance of standard and contemporary music for athletic and school spirit functions. Attendance is required at assigned public performances. Students who repeat this course will improve skills through further instruction and practice.

MUS 44 — Vocal Jazz Ensemble 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
162 hours of lab.
Prerequisite: Admission by audition
A mixed vocal group, which includes a live rhythm section for accompaniment. Performance of vocal music in all jazz idioms. Performs for the public at festivals and at competitions. Scat improvisations and the study of jazz theory will be covered. Auditions are held the first week of classes. Students who repeat this course will improve skills through further instruction and practice.

MUS 45 — Chamber Singers 3 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
162 hours of lab.
Prerequisite: Admission by audition
A highly select mixed choral group, specializing in smaller ensemble repertoire. A wide variety of choral literature is performed publicly several times each semester and a performance tour occurs each spring semester. Emphasizes advanced musical skills and vocal techniques while focusing on the importance of blend, balance, and tone. Auditions for this course are held each May. Students who repeat this course will improve skills through further instruction and practice.

MUS 46 — Mt. SAC Singers 2 Units
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of lecture.
36 hours of 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
(May be taken for option of letter grade or Credit/No Credit.)
162 hours of 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
(May be taken for option of letter grade or Credit/No Credit.)
108 hours of lab.
Prerequisite: Admission by audition the first week of class
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
162 hours of 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
18 hours of 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 approval 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 1A — The Nursing Process I 4.75 Unit
45 hours of lecture. Degree Appropriate, CSU
126 hours of lab.
Prerequisite: Admission to Nursing Program; ANAT 35 or equivalent and ANAT 36 or equivalent, or ANAT 10A or equivalent and ANAT 10B or equivalent, and MICR 22 or equivalent, or MICR 1 or equivalent, and ENGL 1A or equivalent
Corequisite: NURS 2
Principles of nursing as related to 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 hours of lecture. Degree Appropriate, CSU
126 hours of 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.
## Course Descriptions

### NURS 2 — Pharmacology  2 Units
36 hours of lecture.  Degree Appropriate, CSU
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 hours of lecture.  Degree Appropriate, CSU
99 hours of lab.
Prerequisite: NURS 1B and 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 hours of lecture.  Degree Appropriate, CSU
81 hours of 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.

### NURS 5 — Psychiatric Nursing  3 Units
27 hours of lecture.  Degree Appropriate, CSU
81 hours of lab.
Prerequisite: NURS 4 or Advanced Placement and PSYC 1A
Concepts of nursing assessment and intervention with application to clients with psychiatric disorders in a mental health setting. The Betty Neuman Model serves as the conceptual framework.

### NURS 6 — Pediatric Nursing  3 Units
27 hours of lecture.  Degree Appropriate, CSU
81 hours of lab.
Prerequisite: NURS 5 or Advanced Placement and CHLD 10 or PSYC 14
Concepts of nursing assessment and intervention with application to pediatric clients. The Betty Neuman Model serves as the conceptual framework.

### NURS 7 — Medical-Surgical Nursing: Nutrition/Elimination/Surgical Asepsis  7 Units
60 hours of lecture.  Degree Appropriate, CSU
198 hours of lab.
Prerequisite: NURS 6 or Advanced Placement
Concepts of nursing assessment and intervention with application to clients with problems of nutrition, elimination, and the reproductive systems. Clients in pre-, intra-, and post-operative settings are included. The Betty Neuman Model serves as the conceptual framework.

### NURS 8 — Medical-Surgical Nursing: Circulation and Oxygenation  5 Units
45 hours of lecture.  Degree Appropriate, CSU
144 hours of lab.
Prerequisite: NURS 7 or Advanced Placement
Corequisite: NURS 9
Concepts for nursing assessment and intervention with application to clients with cardiovascular and pulmonary problems. The Betty Neuman Model serves as the conceptual framework.

### NURS 9 — Leadership in Nursing  1 Unit
18 hours of lecture.  Degree Appropriate, CSU
Prerequisite: NURS 7 or Advanced Placement
Corequisite: NURS 8
Assists the second year student to develop cognitive skills for first level management positions. To provide information and discussion for current trends and issues in nursing.

### NURS 10 — Medical-Surgical Nursing: Integration/Regulation  4 Units
45 hours of lecture.  Degree Appropriate, CSU
96 hours of lab.
Prerequisite: NURS 8, NURS 9 or Advanced Placement
Corequisite: NURS 11
Concepts for nursing assessment and intervention with application to clients with neurological and endocrine disorders. The Betty Neuman Model serves as the conceptual framework.

### NURS 11 — Preceptorship in Nursing  2 Units
(May be taken for Credit/No Credit only.)  Degree Appropriate, CSU
111.99 hours lab.
Advisory: NURS 10 or Advanced Placement
Students participate as a pre-licensed health team member immediately prior to graduation. Students assume responsibility for a group of clients under direct supervision of a qualified registered nurse.

### NURS 20 — Nursing Work Experience Program  1 Unit
(May be taken four times for credit.)  Non-Degree Credit
75 hours of lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog. Current satisfactory status in the Nursing Program.
On-the-job experience for nursing students in an approved work setting 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.

### NURS 21 — Nursing Work Experience Program  2 Units
(May be taken four times for credit.)  Non-Degree Credit
150 hours of lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog. Current satisfactory status in the Nursing Program.
On-the-job experience for nursing students in an approved work setting 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.

### NURS 22 — Nursing Work Experience Program  3 Units
(May be taken four times for credit.)  Non-Degree Credit
225 hours of lab.
Advisory: NURS 20 or Advanced Placement
Students participate as a pre-licensed health team member during the final quarter of the program. A minimum of 111.99 paid or 75 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.

### NURS 23 — Nursing Work Experience Program  4 Units
(May be taken four times for credit.)  Non-Degree Credit
300 hours of lab.
Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog. Current satisfactory status in the Nursing Program.
On-the-job experience for nursing students in an approved work setting 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.

**NURS 70 — Role Transition** 3 Units
(May be taken for Credit/No Credit only.) Degree Appropriate
36 hours of lecture.
54 hours of lab.
Prerequisite: Advanced Placement; PT (Psychiatric Technician) or LVN (Licensed Vocational Nurse); ANAT 35 or equivalent and ANAT 36 or equivalent, or ANAT 10A or equivalent and ANAT 108 or equivalent, and MICR 22 or equivalent, or MICR 1 or equivalent, and ENGL 1A or equivalent, and PSYC 1 or equivalent, or CHLD 10 or equivalent or PSYC 1A or equivalent

For the LVN (Licensed Vocational Nurse), PT (Psychiatric Technician) or advanced placement students 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.

**NURS 99 — Special Projects in Nursing** 2 Units
(May be taken four times for credit.)

Non-Degree Credit
108 hours of lab.
Prerequisite: Placement in Nursing Program

Provides students the opportunity to explore a discipline in greater depth. Content of each course and the methods of study will depend on the particular project. Instructor's authorization before enrolling is required.

### NUTRITION & FOOD

**NF 10 — Nutrition for Personal Health and Wellness** 3 Units
54 hours of lecture.
Degree Appropriate, CSU
Prerequisite: Eligibility for ENGL 68

Basic principles of human nutrition and their relationship to optimum health. Emphasizes nutrient needs, food selection and weight control during the various life stages from prenatal to adult. Student food intake is evaluated in several ways including computer diet analysis. This course is intended for non-health science majors.

**NF 20 — Principles of Foods with Lab** 3 Units
(CAN FCS 8)
36 hours of lecture.
Degree Appropriate, CSU
54 hours of 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
(CAN FCS 2)
Degree Appropriate, CSU, UC
54 hours of lecture.
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 to analysis and evaluation of nutrition; 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
(CAN FCS 2)
Degree Appropriate, CSU, UC
54 hours of lecture.
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 to analysis and evaluation of nutrition; 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 for accelerated students. Students may not receive credit for both NF 25 and NF 25H.

**NF 28 — Cultural and Ethnic Foods** 3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
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 hours of lecture.
Degree Appropriate, CSU
Prerequisite: Eligibility for ENGL 68

Exploration of food chemistry, food processing and technology and how it 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 31 — Creative Foods** 3 Units
36 hours of lecture.
Degree Appropriate
72 hours of lab.
Prerequisite: NF 20 or food preparation experience

Provides student 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 61 — Cooking for Your Heart and Health** 1 Unit
36 hours of lecture.
Degree Appropriate
54 hours of lab.
Develops management skills related to daily food preparation, emphasizing planning, preparing and serving adequate and attractive meals.

**NF 62 — Meal Management** 3 Units
Spring Semester
Degree Appropriate, CSU
36 hours of lecture.
54 hours of lab.
Develops management skills related to daily food preparation, emphasizing planning, preparing and serving adequate and attractive meals.

**NF 81 — Cooking for Your Heart and Health** 1 Unit
Non-Degree Credit
(May be taken for option of letter grade or Credit/No Credit.)
12 hours of lecture.
12 hours of lab.
Prerequisite: Eligibility for ENGL 68
Skills in healthful food preparation emphasizing foods low in fat, cholesterol and sodium, and high in fiber and nutrients.

**NF 82 — Vegetarian Cuisine** 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
12 hours of lecture.
12 hours of lab.
Investigates nutritional issues related to vegetarian eating practices. Includes laboratory experience in preparation of vegetarian foods and meals.

### OCEANOGRAPHY

**OCEA 10 — Introduction to Oceanography** 3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
An introduction to the ocean environment including the geologic, chemical, physical, and ecological aspects of the field. Topics include plate tectonics, currents, waves, tides, shores and human impact on the oceans. Field trips included.

**OCEA 10H — Introduction to Oceanography – Honors** 3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
Prerequisite: Acceptance into the Honors Program
An honors course designed to provide an enriched experience for accelerated students that 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.
## Course Descriptions

### OCEA 10L — Introduction to Oceanography Laboratory  
1 Unit  
54 hours of lab.  
Degree Appropriate, CSU, UC  
Corequisite: OCEA 10 or OCEA 10H (May have been taken previously)  
Laboratory applications and problem-solving in oceanography, including related aspects of geology, meteorology, and marine biology. Recommended for students needing a lab to transfer to a 4-year college/university.

### PHIL 8 — Critical Thinking  
3 Units  
54 hours of lecture.  
Degree Appropriate, CSU, UC  
Corequisite: OCEA 10 or OCEA 10H (May have been taken previously)  
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 5 — Introduction to Philosophy  
3 Units  
54 hours of lecture.  
Degree Appropriate, CSU, UC  
Corequisite: Eligibility for ENGL 68  
An exploration of basic issues in ethics, social philosophy, metaphysics, theories of knowledge and contemporary philosophies of life.

### PHIL 3H — Logic in Practice — Honors  
3 Units  
54 hours of lecture.  
Degree Appropriate, CSU, UC  
Corequisite: 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 9 — Critical Thinking and Logical Writing  
3 Units  
54 hours of lecture.  
Degree Appropriate, CSU, UC  
Prerequisite: ENGL 1A  
The function and use of formal and informal logic, argument, critical evaluation, and language in written composition.

### PHIL 12H — Ethics – Honors  
3 Units  
54 hours of lecture.  
Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 1A  
A critical analysis of empirical and normative factors involved in choice, including an examination of major ethical theories and their application to the study of moral problems.

### PHIL 12 — Ethics  
3 Units  
54 hours of lecture.  
Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 1A  
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 for accelerated students. Students may not receive credit for both PHIL 12 and PHIL 12H.

### PHIL 15 — Major World Religions  
3 Units  
54 hours of lecture.  
Degree Appropriate, CSU, UC  
Prerequisite: Eligibility for ENGL 68  
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, and Christianity.

### PHIL 15H — Major World Religions – Honors  
3 Units  
54 hours of 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 religions are presented and examined both appreciatively and critically: Hinduism, Buddhism, Taoism, Confucianism, Shinto, Judaism, Christianity, Islam. An honors course designed to provide an enriched experience. Students may not receive credit for both PHIL 15 and PHIL 15H.

### PHIL 20A — History of Western Philosophy  
3 Units  
54 hours of 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 hours of lecture.  
Degree Appropriate, CSU, UC  
Examines the major western philosophy and philosophical ideas from the Renaissance to the twentieth century.

### PHOTOGRAPHICS

### PHOT 1 — Laboratory Studies: Black and White Photography  
1 Unit  
(May be taken three times for credit.)  
Non-Degree Credit  
(May be taken for Credit/No Credit only.)  
54 hours of lab.  
Corequisite: PHOT 10 (May have been taken previously)  
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 three times for credit.)  
Non-Degree Credit  
(May be taken for Credit/No Credit only.)  
54 hours of lab.  
Corequisite: PHOT 20 (May have been taken previously)  
Extended color 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 4 — Digital Cameras and Composition  
1 Unit  
(May be taken for option of letter grade or Credit/No Credit.)  
18 hours of lecture.  
Use of digital cameras, lenses, filters, and exposure to compose quality photographs. Shooting assignments are given for analysis in class. Camera will be required after the second week.

### PHOT 10 — Basic Digital and Film Photography  
3 Units  
36 hours of lecture.  
Degree Appropriate, CSU, UC  
54 hours of lab.  
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 hours of lecture.  
Degree Appropriate, CSU, UC  
108 hours of lab.  
Corequisite: 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 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
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/LiquidLight) as well as other
special techniques.

PHOT 15 — History of Photography 3 Units
54 hours of 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 16 — Fashion Photography 3 Units
36 hours of lecture. Degree Appropriate
54 hours of lab.
Prerequisite: PHOT 11
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.

PHOT 17 — Photocommunication 3 Units
36 hours of lecture. Degree Appropriate
72 hours of lab.
Prerequisite: PHOT 10
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.

PHOT 18 — Portraiture and Wedding Photography 3 Units
36 hours of lecture. Degree Appropriate
54 hours of lab.
Techniques and photographic procedures for taking informal, formal,
environmental and group portraits. In depth study and practice in
professional wedding photography.

PHOT 20 — Color Photography 3 Units
36 hours of lecture. Degree Appropriate
54 hours of lab.
Prerequisite: PHOT 10
An introduction to current methods of producing color media, color
negatives, positive transparencies, and outputting color prints.

PHOT 21 — Exploring Color Photography 3 Units
36 hours of lecture.
54 hours of lab.
Prerequisite: PHOT 20
Explores the application of color processes as they relate to commercial
and artistic styles. Emphasis is on innovative use of color and
temporary techniques. Includes media manipulation and unique
processing, coloring negatives, 8x10 Polaroid, digital imagery, specialized
lighting, set building, and quality control.

PHOT 28 — Photography Portfolio Development 2 Units
18 hours of lecture.
54 hours of lab.
Prerequisite: Minimum 12 units of photography at Mt. San Antonio
College or equivalent preparation
Development of photography portfolio either for job application or
gallery exhibition purposes.

PHOT 30 — Commercial and Illustrative Photography 3 Units
Fall Semester
36 hours of lecture.
54 hours of lab.
Prerequisite: PHOT 11, PHOT 20
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 B & W and color media will be used.

PHOT 99 — Special Projects in Photography 2 Units
(May be taken four times for credit.) Degree Appropriate
36 hours of 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.

PHOT 21 — Exploring Color Photography 3 Units
36 hours of lecture.
54 hours of lab.
Prerequisite: PHOT 20
Explores the application of color processes as they relate to commercial
and artistic styles. Emphasis is on innovative use of color and
temporary techniques. Includes media manipulation and unique
processing, coloring negatives, 8x10 Polaroid, digital imagery, specialized
lighting, set building, and quality control.

PHOT 28 — Photography Portfolio Development 2 Units
18 hours of lecture.
54 hours of lab.
Prerequisite: Minimum 12 units of photography at Mt. San Antonio
College or equivalent preparation
Development of photography portfolio either for job application or
gallery exhibition purposes.

PHOT 30 — Commercial and Illustrative Photography 3 Units
Fall Semester
36 hours of lecture.
54 hours of lab.
Prerequisite: PHOT 11, PHOT 20
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 B & W and color media will be used.

PHOT 99 — Special Projects in Photography 2 Units
(May be taken four times for credit.) Degree Appropriate
36 hours of 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.

PE-L 2 — Physical Fitness for the Physically Limited 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 hours of activity.
A modified muscular conditioning program using machines and free
weights specifically designed to assist students with a physical
challenge. Students who repeat this course will improve daily living
skills through further instruction and practice.

PE-L 4 — Adaptive Aquatics 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 hours of activity.
Designed to assist students with a disability in developing swimming
skills as well as provide hydrotherapy. Students who repeat this
course will improve skills through further instruction and practice.

PE-L 10 — Wheelchair 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 hours of activity.
Individual sports technique enhancement. Incorporate the use of a
wheelchair in sports activities. Introduction to basic rules, skills,
conditioning and strategies of the sport. Students who repeat this
course will improve skills through further instruction and practice.

PE-L 14 — Activity Programs for the Physically Limited 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 hours of activity.
Designed for challenge students 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 skills through further instruction and practice.

PE-L 14-2 — Activity Programs for the Physically Limited 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.)
36 hours of activity.
Designed for challenge students 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 skills through further instruction and practice.

PE-L 18 — Weight Training for the Physically Limited 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 hours of activity.
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.

Section 10 187
Course Descriptions

**PE-A 8B — Swimming – 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.)
36 hours of 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.

**PE-A 8A-2 — Swimming – Beginning** .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 hours of 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.

**PE-A 8A — Swimming – 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 hours of 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.

**PE-A 8B — Swimming – 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 hours of 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.

**PE-A 8C — Swimming – 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 hours of activity.
Prerequisite: Demonstrate proficiency equivalent to Red Cross Swimming Test
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.

**PE-A 8C-2 — Swimming – Advanced** .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 hours of activity.
Prerequisite: Demonstrate proficiency equivalent to Red Cross Swimming Test
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.

**PE-L 18-2 — Weight Training for the Physically Limited** .5 Unit
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of activity.
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.

**PE-L 18 — Weight Training for the Physically Limited** 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
108 hours of activity.
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.

**PE-A 4 — Lifeguard Training** 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 hours of activity.
Prerequisite: 15 years of age or older, demonstrate ability to swim 500 yards using crawl, breaststroke, elementary backstroke, and sidestroke; surface dive to 9 feet and bring a ten pound brick to surface; swim under water 15 yards; tread water for two minutes continuously, legs only

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 Training, 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.

**PE-A 8A — Swimming – 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 hours of 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.

**PE-A 8A-2 — Swimming – Beginning** .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 hours of 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.

**PE-A 14 — Water Polo** 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 hours of activity.
Offers fundamental water polo skills including conditioning, drills, and game situations. Students who repeat this course will improve skills through further instruction and practice.

**PE-A 14-2 — Water Polo** .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 hours of activity.
Offers fundamental water polo skills including conditioning, drills, and game situations. Students who repeat this course will improve skills through further instruction and practice.

**PE-A 16 — Water Safety Instructor** 2 Units
(CAN KINE10) Degree Appropriate, CSU, UC
(May be taken four times for credit.)
108 hours of activity.
Prerequisite: 1) 17 years of age or older at the start of the course; 2) Demonstrate proficiency equivalent to Level VI of the American Red Cross Learn to Swim Program; 3) Demonstrate skills on a proficiency level equal to the American Red Cross Emergency Water Safety course
Analysis and performance of swimming skills related to safety; theory and application of methods of organizing and presenting aquatic materials. Satisfactory completion of the course may lead to the American Red Cross Water Safety Instructor's Certificate. Repeating this course will allow for renewal of certificate and improve skills through further instruction and practice.

**PE-A 18 — Springboard Diving** 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 hours of activity.
Student must possess above average diving ability or experience in tumbling or gymnastics. Individualized instruction in the fundamentals and techniques of springboard diving. Students who repeat this course will improve skills through further instruction and practice.

**PE-A 18-2 — Springboard Diving** .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.)
27 hours of activity.
Student must possess above average diving ability or experience in tumbling or gymnastics. Individualized instruction in the fundamentals and techniques of springboard diving. Students who repeat this course will improve skills through further instruction and practice.

**PE-A 20 — Aquatic Fitness** 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 hours of activity.
Student must be able to perform front crawl 50 yards. Designed to improve and maintain aquatic fitness. Emphasis on building strength, endurance and cardiovascular fitness. Students who repeat this course will improve skills through further instruction and practice.

**PE-A 20-2 — Aquatic Fitness** .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.)
27 hours of activity.
Student must be able to perform front crawl 50 yards. Designed to improve and maintain aquatic fitness. Emphasis on building strength, endurance and cardiovascular fitness. Students who repeat this course will improve skills through further instruction and practice.
PE-A 21 — Aqua 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 hours of activity.
Designed to improve cardiovascular endurance, strength, agility, flexibility and general fitness through the mode of dynamic movement in the water. Appropriate for swimmers and nonswimmers. Students who repeat this course will improve skills through further instruction and practice.

PE-A 21-2 — Aqua Aerobics 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 hours of activity.
A conditioning course for the serious swimmer to receive individualized training in order to improve competitive performance. Students who repeat this course will improve skills through further instruction and practice.

PE-A 24 — Aquatic Off-Season Conditioning 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 hours of activity.
A conditioning course for the serious swimmer to receive individualized training in order to improve competitive performance. Students who repeat this course will improve skills through further instruction and practice.

PE-A 24-2 — Aquatic Off-Season Conditioning 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 hours of activity.
A conditioning course for the serious swimmer to receive individualized training in order to improve competitive performance. Students who repeat this course will improve skills through further instruction and practice.

PHYSICAL EDUCATION: ATHLETICS

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 hours of activity.
Enrollment is limited to team candidates and includes a minimum of 10 hours per week practice and intercollegiate competition. The objective of students who repeat this course is further improvement through practice and instruction.

PE-X 8A — 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 hours of activity.
Designed for Men's Intercollegiate Basketball Team candidates and provides 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 8B — 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 hours of activity.
Advisory: PE-X 8A
Enrollment is limited to team candidates and includes a minimum of 10 hours per week practice and intercollegiate competition. Advanced skills and strategies will be presented. Students who repeat this course will improve conditioning through continued instruction and participation.

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 hours of activity.
Designed for Women's Intercollegiate Basketball Team candidates and provides 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 10B — 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 hours of activity.
Advisory: PE-X 10A
Enrollment is limited to team candidates and includes a minimum of 10 hours per week practice and intercollegiate competition. Advanced skills and strategies will be presented. Students who repeat this course will improve conditioning through continued instruction and participation.

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 hours of 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 hours of 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 16 — Football — 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 hours of activity.
Designed for Men's Intercollegiate Football Team candidates and provides instruction in the components of training and conditioning related to the sport of football. 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 hours of activity.
Designed for Men'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 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 hours of 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 hours of 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.

PE-X 25 — Soccer — 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 hours of activity.
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.
## Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-X 26</td>
<td>Softball – Women</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 28</td>
<td>Swimming – Men</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 30</td>
<td>Swimming – Women</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 32</td>
<td>Tennis – Men</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Designed for Men's Intercollegiate Tennis Team candidates and provides instruction in the components and training related to the sport of tennis. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 34</td>
<td>Tennis – Women</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Designed for Women's Intercollegiate Tennis Team candidates and provides instruction in the components and training related to the sport of tennis. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 36</td>
<td>Track and Field – Men</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Designed for students wishing to compete and/or train in intercollegiate track and field. Students will participate in a minimum of 10 hours per week at practice and intercollegiate competition. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 42</td>
<td>Track and Field – Women</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Designed for students wishing to compete and/or train in intercollegiate track and field. Students will participate in a minimum of 10 hours per week at practice and intercollegiate competition. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 44</td>
<td>Volleyball – Men</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enrollment is limited to team candidates and includes a minimum of 10 hours per week of practice and intercollegiate competition. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 46</td>
<td>Volleyball – Women</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advisory: PE 75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enrollment is limited to team candidates and includes a minimum of 10 hours per week of practice and intercollegiate competition. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 48</td>
<td>Water Polo – Men</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enrollment is limited to team candidates and includes a minimum of 10 hours per week of practice and intercollegiate competition. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 49</td>
<td>Water Polo – Women</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enrollment is limited to team candidates and includes a minimum of 10 hours per week of practice and intercollegiate competition. Students who repeat this course will improve skills through further instruction and practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 50</td>
<td>Wrestling – Men</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enrollment is for Men's Intercollegiate Wrestling Team candidates and 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>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 70</td>
<td>Pep Squad</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>180 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 99-2</td>
<td>Off-Season Athletics</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>36 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 99-4</td>
<td>Off-Season Athletics</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>72 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-X 99-6</td>
<td>Off-Season Athletics</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May be taken four times for credit.)</td>
<td></td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td></td>
<td>108 hours of activity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------</td>
<td>-------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PE-F 2A</td>
<td>Body Building – Beginning</td>
<td>1 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Basic fundamentals of strength development and physical conditioning. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 2A-2</td>
<td>Body Building – Beginning</td>
<td>0.5 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 2B</td>
<td>Body Building – Advanced</td>
<td>1 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Basic fundamentals of strength development and physical conditioning. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 2B-2</td>
<td>Body Building – Advanced</td>
<td>0.5 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 4</td>
<td>Cardiovascular Conditioning</td>
<td>1 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 4-2</td>
<td>Cardiovascular Conditioning</td>
<td>0.5 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 6A</td>
<td>Physical Fitness – Beginning</td>
<td>1 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 6A-2</td>
<td>Physical Fitness – Beginning</td>
<td>0.5 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 6B</td>
<td>Physical Fitness – Intermediate</td>
<td>1 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 6B-2</td>
<td>Physical Fitness – Intermediate</td>
<td>0.5 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 9</td>
<td>Conditioning for Sports</td>
<td>1 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 9-2</td>
<td>Conditioning for Sports</td>
<td>0.5 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 10</td>
<td>Weight Training</td>
<td>1 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 10-2</td>
<td>Weight Training</td>
<td>0.5 Unit</td>
<td>Designed to improve fitness levels through cardiovascular activities. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-F 12</td>
<td>Fitness and Body Conditioning</td>
<td>1 Unit</td>
<td>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 12-2</td>
<td>Fitness and Body Conditioning</td>
<td>0.5 Unit</td>
<td>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>
</tbody>
</table>
Course Descriptions

**PE-F 13 — Exercise Dynamics** 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 hours of activity.
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.

**PE-F 15 — Off-Season Conditioning** 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.)
72 hours of activity.
Off-season conditioning for the competitive athlete. Provides instruction in the components of training and conditioning related to the sport. Students who repeat this course will improve skills through further instruction and practice.

**PE-F 15-2 — Off-Season Conditioning** .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 hours of activity.
Off-season conditioning for the competitive athlete. Provides instruction in the components of training and conditioning related to the sport. Students who repeat this course will improve skills through further instruction and practice.

**PE-F 17 — Fitness Walking** 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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.

**PE-F 17-2 — Fitness Walking** .5 Unit
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of 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.

**PE-F 18 — Fitness Fundamentals** 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 hours of 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.

**PE-F 19 — Strength 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 hours of 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.

**PE-F 20 — Total Fitness — Beginning** 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 hours of 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.

**PE-F 21 — Total Fitness — Continuation** 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 hours of activity.
Continued overview of health concepts; heightened emphasis on 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.

**PE-F 22 — Total Fitness — Beginning** 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 hours of 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.

**PE-F 30 — Baseline Fitness Assessment** .25 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
18 hours of 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.

**PE-F 31 — Fitness Testing** 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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.

**PE-F 34 — Cardiorespiratory Training** 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of activity.
Individualized exercise programs designed to improve cardiorespiratory performance. Students who repeat this course will improve skills through further instruction and practice.

**PE-F 34-2 — Cardiorespiratory Training** .5 Unit
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of activity.
Individualized exercise programs designed to improve cardiorespiratory performance. Students who repeat this course will improve skills through further instruction and practice.

**PE-F 35 — Cardiorespiratory Training** 2 Units
(May be taken for option of letter grade or Credit/No Credit.)
108 hours of 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.

**PE-F 36 — Circuit Training** 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of activity.
Muscular strength and endurance exercise on circuit training equipment. Students who repeat this course will improve skills through further instruction and practice.

**PE-F 36-2 — Circuit Training** .5 Unit
(May be taken for option of letter grade or Credit/No Credit.)
36 hours of activity.
Muscular strength and endurance exercise on circuit training equipment. Students who repeat this course will improve skills through further instruction and practice.

**PE-F 37 — Circuit Training** 2 Units
(May be taken for option of letter grade or Credit/No Credit.)
108 hours of activity.
Muscular strength and endurance exercise on circuit training equipment. Students who repeat this course will improve skills through further instruction and practice.

**PE-F 38 — Aerobics** 1 Unit
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of activity.
Group aerobic exercise to improve cardio respiratory efficiency. Students who repeat this course will improve skills through further instruction and practice.
Prepare the Basic Fire Academy student for the physical demands of the fire service. Through a supervised individualized training program, the student will acquire cardiovascular endurance, flexibility and strength. Students who repeat this course will improve skills through further instruction and practice.

PE-F 59 — Firefighter Physical Ability Test .1 Unit
(May be taken for Credit/No Credit only.) Non-Degree Credit
2 hours of 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.

PHYSICAL EDUCATION: INDIVIDUAL

PE-I 1 — Rock Climbing 1 Unit
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU, UC
54 hours of 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 4A — Badminton – Beginning 1 Unit
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU, UC
54 hours of 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 4A-2 — Badminton – Beginning .5 Unit
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU, UC
36 hours of 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 4B — Badminton – Intermediate 1 Unit
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU, UC
54 hours of activity.
Intermediate badminton fundamentals and techniques, including competitive strategies. Students who repeat this course will improve skills through further instruction and practice.

PE-I 4B-2 — Badminton – Intermediate .5 Unit
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU, UC
36 hours of activity.
Intermediate badminton fundamentals and techniques, including competitive strategies. Students who repeat this course will improve skills through further instruction and practice.

PE-I 18A — Golf – Beginning 1 Unit
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU, UC
54 hours of activity.
Basic fundamentals of golf. Emphasis on technique, strategy, and rules. Students who repeat this course will improve skills through further instruction and practice.

PE-I 18A-2 — Golf – Beginning .5 Unit
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU, UC
36 hours of activity.
Basic fundamentals of golf. Emphasis on technique, strategy, and rules. Students who repeat this course will improve skills through further instruction and practice.

PE-I 18B — Golf – Intermediate 1 Unit
(May be taken for option of letter grade or Credit/No Credit.) Degree Appropriate, CSU, UC
54 hours of activity.
Intermediate 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.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-I 18B-2</td>
<td>Golf – Intermediate</td>
<td>.5</td>
<td>Offers instruction to the experienced golfer. Emphasis on offense, defense, cardiovascular endurance, strategy and training exercises in the Tai Chi Chuan format will be presented. 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</td>
<td>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 28</td>
<td>Racquetball</td>
<td>1</td>
<td>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>
</tr>
<tr>
<td>PE-I 29</td>
<td>Self Defense/Martial Arts</td>
<td>1</td>
<td>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>
</tr>
<tr>
<td>PE-I 29-2</td>
<td>Self Defense/Martial Arts</td>
<td>.5</td>
<td>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>
</tr>
</tbody>
</table>

### Additional Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-I 31A-2</td>
<td>Jiu-Jitsu – Advanced</td>
<td>1</td>
<td>Fundamentals of Brazilian Jiu-Jitsu. Basic positions, breakfalls, training techniques, strategy, finishing holds, competition, history and philosophy. Students who repeat this course will improve skills through further instruction and practice. Students are required to provide their own Judo/Jiu-Jitsu gi uniform.</td>
</tr>
<tr>
<td>PE-I 33</td>
<td>Kickboxing</td>
<td>1</td>
<td>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>
</tr>
<tr>
<td>PE-I 34</td>
<td>Women's Self Defense</td>
<td>1</td>
<td>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>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-I 35</td>
<td>Karate</td>
<td>1</td>
<td>Fundamentals of traditional karate. Includes form, technique, history and philosophy. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE-I 35-2</td>
<td>Karate</td>
<td>.5</td>
<td>Fundamentals of traditional karate. Includes form, technique, history and philosophy. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>

### Additional Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-I 37A</td>
<td>Tai Chi Chuan – Beginning</td>
<td>1</td>
<td>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>
</tr>
<tr>
<td>PE-I 37A-2</td>
<td>Tai Chi Chuan – Beginning</td>
<td>.5</td>
<td>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>
</tr>
</tbody>
</table>

### Additional Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-I 37B</td>
<td>Tai Chi Chuan – Intermediate</td>
<td>1</td>
<td>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>
</tr>
<tr>
<td>PE-I 37B-2</td>
<td>Tai Chi Chuan – Intermediate</td>
<td>.5</td>
<td>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>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Prerequisites</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>PE-I 37C</td>
<td>Tai Chi Chuan – Advanced</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 37C2</td>
<td>Tai Chi Chuan – Advanced</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 3B</td>
<td>Skiing Skills</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 40A</td>
<td>Tennis – Beginning</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 40A-2</td>
<td>Tennis – Beginning</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 40B</td>
<td>Tennis – Intermediate</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 40B-2</td>
<td>Tennis – Intermediate</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 40C</td>
<td>Tennis – Advanced</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 40C-2</td>
<td>Tennis – Advanced</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 44</td>
<td>Track and Field</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 44-2</td>
<td>Track and Field</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 48</td>
<td>Wrestling</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-I 48-2</td>
<td>Wrestling</td>
<td>.5 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>PE-S 2</td>
<td>Basketball</td>
<td>1 Unit</td>
<td>Degree Appropriate, CSU, UC</td>
</tr>
<tr>
<td>Course Description</td>
<td>Unit(s)</td>
<td>Type</td>
<td>Details</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>---------</td>
<td>------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>PE-S 16 — Softball</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of activity. Basic skills, rules and strategies for team play in softball. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>PE-S 16 — Softball</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 17 — Indoor Soccer</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of activity. Indoor soccer skills, fundamentals and game play. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>PE-S 17 — Indoor Soccer</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 18 — Team Sports</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of 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.</td>
</tr>
<tr>
<td><strong>PE-S 18 — Team Sports</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 19 — Volleyball — Beginning</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of activity. Basic techniques and strategies of volleyball. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>PE-S 19 — Volleyball — Beginning</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 20 — Volleyball — Intermediate</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of 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.</td>
</tr>
<tr>
<td><strong>PE-S 20 — Volleyball — Intermediate</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 21 — Volleyball — Advanced</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of 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.</td>
</tr>
<tr>
<td><strong>PE-S 21 — Volleyball — Advanced</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 22 — Roller Hockey</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of activity. Fundamentals of roller hockey will be presented. Includes basic technique, rules, strategy, and game play. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>PE-S 22 — Roller Hockey</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 23 — Roller Hockey</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of activity. Fundamentals of roller hockey will be presented. Includes basic technique, rules, strategy, and game play. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>PE-S 23 — Roller Hockey</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 24A — Volleyball — Advanced</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of activity. Basic techniques and strategies of volleyball. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>PE-S 24A — Volleyball — Advanced</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 24B — Volleyball — Intermediate</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of 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.</td>
</tr>
<tr>
<td><strong>PE-S 24B — Volleyball — Intermediate</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 24C — Volleyball — Advanced</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of 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.</td>
</tr>
<tr>
<td><strong>PE-S 24C — Volleyball — Advanced</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
<tr>
<td><strong>PE-S 24D — Roller Hockey</strong></td>
<td>1</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 54 hours of activity. Fundamentals of roller hockey will be presented. Includes basic technique, rules, strategy, and game play. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td><strong>PE-S 24D — Roller Hockey</strong></td>
<td>0.5</td>
<td></td>
<td>(May be taken for option of letter grade or Credit/No Credit.) 36 hours of activity.</td>
</tr>
</tbody>
</table>
### PHYSICAL EDUCATION: THEORY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 1</td>
<td>Camp Leadership</td>
<td>2</td>
<td>Degree Appropriate, CSU 36 hours of lecture. A survey of camping. Includes activities, programs and leadership in organized camps.</td>
</tr>
<tr>
<td>PE 2</td>
<td>The Recreation Program</td>
<td>2</td>
<td>Degree Appropriate, CSU 36 hours of lecture. Methods and materials used in planning and conducting organized recreation programs. Theory and case studies of play and recreation with special emphasis on supervised programming.</td>
</tr>
<tr>
<td>PE 3</td>
<td>First Aid and CPR</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Provides training, including laboratory experience in caring for victims of injuries, sudden illness and other medical emergencies; includes Community CPR. Students who successfully pass all requirements, will earn the appropriate American Red Cross First Aid Certificate and/or CPR Certificate.</td>
</tr>
<tr>
<td>PE 4</td>
<td>Advanced First Aid/CPR/Emergency Response</td>
<td>3</td>
<td>Degree Appropriate, CSU 54 hours of lecture. Provides training and certifications, including laboratory experience for developing the First Aid and CPR skills required by public safety personnel, athletic trainers, emergency response team members, flight attendants, coaches and nurses. Students who successfully pass all requirements will receive an American Red Cross First Aid Certificate in Emergency Response and/or CPR for the Professional Rescuer.</td>
</tr>
<tr>
<td>PE 6</td>
<td>Sports Officiating</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Introduction to rules, regulations and career opportunities of various team and individual sports.</td>
</tr>
<tr>
<td>PE 7</td>
<td>Leadership in Physical Education</td>
<td>1</td>
<td>Degree Appropriate 18 hours of lecture. Offers the opportunity to develop leadership skills through practical experience in physical education activity. Students repeating this course will receive assignments of a progressively more advanced nature resulting in increased proficiency in leadership ability.</td>
</tr>
<tr>
<td>PE 8</td>
<td>Administration of Fitness Programs</td>
<td>2</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36 hours of lecture. Provides leadership training and administrative skills related to fitness specialists, personal trainers and physical educators. Students will explore curriculum topics and practical skills related to careers in fitness and physical education.</td>
</tr>
<tr>
<td>PE 9</td>
<td>Introduction to Physical Education</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Introduction and orientation to physical education as a profession and academic discipline. Explores sub-disciplines, opportunities in the field, philosophy, scientific basis and analysis.</td>
</tr>
<tr>
<td>PE 10</td>
<td>Introduction to Care/Prevention of Activity/Sports-Related Injuries</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Instruction, including laboratory experience, in the techniques and procedures for prevention and treatment of activity and sports-related injuries. Includes the responsibilities of the athletic trainer, policies and procedures of the athletic training room and the operation of rehabilitative modalities.</td>
</tr>
<tr>
<td>PE 11</td>
<td>Recreation and Leisure Services</td>
<td>3</td>
<td>Degree Appropriate, CSU 54 hours of lecture. History, philosophy, theory, and organization of recreation, including various agencies providing recreation and leisure services. Emphasis upon functions, areas, facilities, clientele, and career opportunities. Field visits required.</td>
</tr>
<tr>
<td>PE 12</td>
<td>Kinesiology</td>
<td>2</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36 hours of 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.</td>
</tr>
<tr>
<td>PE 13</td>
<td>Sports Related Occupations</td>
<td>2</td>
<td>Degree Appropriate, CSU 36 hours of lecture. Designed to examine sports related occupations. Includes an assessment of the student's existing skills and interests.</td>
</tr>
<tr>
<td>PE 14</td>
<td>Fitness Assessment and Healthy Lifestyles</td>
<td>.5</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 9 hours of lecture. An integrated approach to healthy lifestyles. Includes pre and post fitness assessments, basic nutrition analysis, lifestyle behaviors and stress management. Interpretation of results includes goal-setting principles and development of basic exercise program. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>PE 15</td>
<td>Fitness for Living</td>
<td>3</td>
<td>Degree Appropriate 54 hours of lecture. Degree Appropriate Survey and analysis of the components of fitness. Effects of fitness on optimal health; concepts of human movement; fitness program design; stress management; nutrition and weight control.</td>
</tr>
<tr>
<td>PE 16</td>
<td>Physiology of Exercise for Fitness</td>
<td>3</td>
<td>Degree Appropriate 54 hours of lecture. Degree Appropriate Theory of basic physiological concepts as they pertain to exercise training and the prescription of individual fitness programs.</td>
</tr>
<tr>
<td>PE 17</td>
<td>Techniques of Fitness Testing</td>
<td>2</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36 hours of lecture. Theory and technique of performing fitness testing, assessment, evaluation, and recommendation. Includes related laboratory experience and practical applications.</td>
</tr>
<tr>
<td>PE 18</td>
<td>Techniques of Teaching Cardiovascular Exercise</td>
<td>2</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36 hours of 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.</td>
</tr>
<tr>
<td>PE 19</td>
<td>Techniques of Teaching Weight Training</td>
<td>2</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 36 hours of 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.</td>
</tr>
<tr>
<td>PE 20</td>
<td>Sports Management</td>
<td>3</td>
<td>Degree Appropriate (May be taken for option of letter grade or Credit/No Credit.) 54 hours of lecture. Basic theory of sports management will be presented. Topics include sports management and organizational skills; sports marketing and fundraising; sport communication; sport finance; safety issues; economics; law and governance.</td>
</tr>
</tbody>
</table>
Course Descriptions

PE 44 — Theory of Coaching
3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Designated 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 45 — Techniques of Coaching
.5 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
9 hours of lecture.
Designed for high school coaches, but is appropriate for coaches of all levels. Includes California Interscholastic Federation (CIF) regulations, Title 5 of the California Education Code, safety and liability concerns and coaching ethics.

PE 46 — Sports Safety Training
.5 Unit
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
9 hours of lecture.
Introduction to basic life support for sports professionals. Includes basic first aid & CPR and knowledge to care for athletic injuries. Students who successfully pass all requirements will earn the appropriate Red Cross First Aid ation. Repeating the course will allow for renewal of certificates and improvement in technique.

PE 47 — Psychology of Sport
3 Units
Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
Principles underlying sport behavior and cognition. Includes personality types, communication, motivation, environment, group processes and enhancing performance.

PE 48 — Lifeguard Training
3 Units
Degree Appropriate, CSU, UC
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of 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 C.P.R for the Professional Rescuer.

PE 50 — Mt. Sac Fire Academy Physical Ability
.5 Unit
Entrance Exam
(May be taken four times for credit.) Non-Degree Credit
(May be taken for Credit/No Credit only.)
9 hours of lecture.
9 hours of 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 proficiency and skills through continued instruction and practice.

PE 81 — Work Experience for Coaching
2 Units
(May be taken four times for credit.) Degree Appropriate
(May be taken for option of letter grade or Credit/No Credit.)
150 hours of 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 clock 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.) Degree Appropriate
75 hours of 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 hours of 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.

PHSC 3 — Energy Science
4 Units
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Advisory: Eligibility for MATH 51, eligibility for ENGL 1A
Physical principles underlying the various forms of energy production. Examines feasibility, consequences, cost, and benefits of both traditional and alternative sources of energy. Field trips required.

PHSC 7 — Physical Science
3 Units
54 hours of 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, head 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.

PHSC 7L — Physical Science Laboratory
1 Unit
54 hours of lab. Degree Appropriate, CSU, UC, Corequisite: PHSC 7
Laboratory topics will parallel the course content of Physical Science lecture.

PHTH 81 — Physical Therapy Aide
4 Units
54 hours of lecture. Degree Appropriate
54 hours of lab.
Advisory: ANAT 50 or equivalent
Provides an overview of physician assistant fundamentals, ethics, topics presented in physician assistant programs. Analyzes stress coping mechanisms and time management for physician assistant students.
PAP 102 — Service Learning/Seminar for Physician Assistant Preparatory Program
6 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC
36 hours of lecture.
216 hours of lab.
Advisory: PAP 101 taken concurrently
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.

PHYSICS

PHYS 1 — Physics
4 Units
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Prerequisite: MATH 51 or MATH 51B or equivalent high school courses
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
4 Units
(CAN PHYS 2)
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of 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 2BG — General Physics
4 Units
(CAN PHYS 4)
Spring Semester
54 hours of lecture. Degree Appropriate, CSU, UC
54 hours of lab.
Prerequisite: PHYS 2AG or equivalent
A continuation of Physics 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.

PHYS 4A — Engineering Physics
5 Units
(CAN PHYS B)
PHYS 4A + 4B + 4C = CAN PHYS SEQ B
72 hours of lecture.
54 hours of lab.
Prerequisite: PHYS 2AG or one year of high school physics (C or better)
Corequisite: MATH 181 (May have been taken previously)
Studies linear and rotational motion, forces, work, energy, oscillations, gravitation, properties of solids, and waves. Includes laboratory experience, with significant use of computers for data acquisition and analysis.

PHYS 4B — Engineering Physics
5 Units
(CAN PHYS 12)
PHYS 4A + 4B + 4C = CAN PHYS SEQ B
72 hours of lecture.
54 hours of lab.
Prerequisite: PHYS 4A
Corequisite: MATH 280 (May have been taken previously)
Heat, kinetic theory of gases, thermodynamics, electromagnetism (including DC and AC circuits,) and Maxwell’s equations. Laboratory includes significant use of computers for data acquisition, analysis and simulation.

PHYS 4C — Engineering Physics
5 Units
(CAN PHYS 14)
PHYS 4A + 4B + 4C = CAN PHYS SEQ B
72 hours of lecture.
54 hours of lab.
Prerequisite: PHYS 4B
Fluids, sound, electromagnetic waves, optics, diffraction and interference of waves, relativity, quantum physics, atomic and nuclear structure, nuclear reactions and elementary particles. Laboratory includes significant use of computers for data analysis.

PHYS 99 — Special Projects in Physics
2 Units
(May be taken four times for credit.) Degree Appropriate, CSU, UC
36 hours of lecture.
Carequisite: PHYS 1 or PHYS 2AG or PHYS 4A (May have been taken previously)
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. Student must have instructor’s authorization before enrolling in this class. Students who repeat this course will improve skills by further instruction and practice.

POLITICAL SCIENCE

POLI 1 — Political Science
3 Units
(CAN GOVT 2)
Degree Appropriate, CSU, UC
54 hours of lecture.
Principles and problems of government with particular emphasis on national government in the United States. This course satisfies the requirement for a course in the Constitution of the United States and the principles of State and local government as required by Title 5 of the California Administrative Code.

POLI 1H — Political Science – Honors
3 Units
(CAN GOVT 2)
Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: Acceptance into the Honors Program
Comparative study of constitutional principles, governmental institutions, political processes, and ideologies in selected countries.

POLI 2 — Political Science
3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
Prerequisite: POLI 1 or POLI 1H
Principles and problems of government with particular emphasis on national government in the United States. This course satisfies the requirement for a course in the Constitution of the United States and the principles of State and local government 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 POLI 1 and POLI 1H.

POLI 25 — Politics of the Mexican American
3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
Prerequisite: Eligibility for ENGL 68
Studies the impact that national, state and local governments have on the nation’s largest ethnic minority (the Latino Community). Examines the national and state constitutions and the impact they have had on the Hispanic Community as a whole (not just Mexican Americans). Studies American institutions as they pertain to the Chicano Community and examines the Chicano Community’s responses to the actions of the dominant political institutions.
COURSE DESCRIPTIONS

Poli 30 — California State and Local Government 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Surveys the forces shaping California government and analyzes the operation of governmental institutions within California and the political and fiscal challenges facing California.

Poli 35 — African American Politics 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Advisory: Eligibility for ENGL 68
Examines the methods and strategies employed by African-Americans in their quest to gain equal access and participation in American institutions. This course satisfies the requirement for a course in the Constitution of the United States and the principles of State and local government as required by Title 5 of the California Administrative Code.

Psychology

Psych 1A — Introduction to Psychology 3 Units
(CAN PSY 2) Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: Eligibility for ENGL 68
Develops understanding of the basic principles of behavior and mental processes. The subject matter and research methods of scientific psychology are presented. Topics include: history, biopsychology, sensation, perception, states of consciousness, learning, memory, forgetting, language, cognition, life-span development, gender, sexuality, stress, health, motivation, emotions, social psychology, abnormality, treatment and social and diversity issues.

Psych 1AH — Introduction to Psychology – Honors 3 Units
(CAN PSY 2) Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: Acceptance into the Honors Program
Develops understanding of the basic principles underlying behavior and cognition. The subject matter and methods of scientific psychology are presented. Topics include: scientific methodology, history, biopsychology, sensation, perception, states of consciousness, learning, memory, forgetting, language, cognition, intelligence, life-span development, personality, stress, health, motivation, emotions, psychopathology, psychotherapeutic approaches, and social factors. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both PSYC 1A and PSYC 1AH.

Psych 1B — Biological Psychology 3 Units
(CAN PSY 10) Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: PSYC 1A or PSYC 1AH
Advisory: Eligibility for ENGL 1A
Biological mechanisms of behavior; introduction of evolution and genetics with emphasis on neuronal and synaptic transmission. Develops a conceptual framework and awareness of the scientific method. Stresses specific methods of investigation for the discipline.

Psych 10 — Statistics for the Behavioral Sciences 4 Units
(CAN PSY 6) Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: PSYC 1A or PSYC 1AH
Advisory: Eligibility for ENGL 1A
Statistical analyses through the use of computerized statistical packages are interpreted through lab experience.

Psych 14 — Developmental Psychology 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
Advisory: Eligibility for ENGL 68
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.

Psych 17 — Introduction to Human Services 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
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.

Psych 19 — Abnormal Psychology 3 Units
54 hours of 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.

Psych 25 — The Psychology of Women 3 Units
54 hours of lecture. Degree Appropriate, CSU, UC
A bio-cultural analysis of women. Emphasis will be placed on biological, psychological and sociological data related to principles of development, socialization, learning, motivation, emotion and perception.

Psych 26 — Psychology of Sexuality 3 Units
54 hours of 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.

Psych 33 — Psychology for Effective Living 3 Units
54 hours of lecture. Degree Appropriate, CSU
Emphasis on comprehension 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.

Psych 40 — Introduction to Interviewing and Counseling 3 Units
54 hours of lecture. Degree Appropriate, CSU
Provides a basic overview of the helping professions. 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.

Psych 50 — Psychology of Human Relations 3 Units
54 hours of 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.
Course Descriptions

PSYC 99 — Special Projects in Psychology 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
36 hours of lecture.
To offer selected students recognition for their academic interest and ability and the opportunity to explore their disciplines to greater depth, the various departments offer Special Project 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 each course will make individual contracts of a more advanced nature with the instructor to ensure that proficiencies are enhanced.

RADIO-TELEVISION

R-TV 01 — Introduction to Broadcasting 3 Units
54 hours of lecture. Degree Appropriate, CSU
Prerequisite: Eligibility for ENGL 68
Theory and operation of the broadcasting industry to include the history and regulation of broadcasting in the United States, the social and economic setting of American broadcasting, and the organization of commercial radio and television stations.

R-TV 02 — Radio and Television Announcing 3 Units
54 hours of lecture. Degree Appropriate, CSU
Lecture and lab in 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 03 — Sportscasting and Reporting 1.5 Units
(May be taken two times for credit.) Degree Appropriate
27 hours of lecture.
Corequisite: R-TV 01 and R-TV 11A (May have been taken previously)
This class covers in-studio sportscasting, interviewing, field reporting and play-by-play for radio and television. 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 who repeat this course will improve skills through further instruction and practice.

R-TV 04 — Broadcast News Field Reporting 3 Units
(May be taken two times for credit.) Degree Appropriate
54 hours of 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 hours of 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 Newsboss 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 hours of 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 traffic 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 hours of 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 — KSAK Radio Studio Operations 2 Units
(May be taken two times for credit.) Degree Appropriate, CSU
(May be taken for Credit/No Credit only.)
36 hours of lecture.
Corequisite: R-TV 01 (May have been taken previously)
A training course for positions at Mt. SAC’s on-campus radio station, KSAK. Includes programming, production procedures, news, DJ and promotions, and FCC rules and regulations. Recommended for students wanting to become a part of KSAK 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 hours of 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 hours of 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 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Corequisite: R-TV 01 (May have been taken previously)
Operation of standard radio production equipment including the console, microphone, reel-to-reel tape deck, CD players, and cart machines. Production skills will 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 hours of lecture. Degree Appropriate, CSU
Corequisite: R-TV 01 (May have been taken previously)
Concentrates on the planning, producing, editing of such programs as interviews, talk shows, and documentaries to give students practical programming experience.

R-TV 12 — Commercial Copywriting 3 Units
54 hours of lecture. Degree Appropriate
Advisory: R-TV 01
Covers the strategies and legalities of advertising time sales 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 15 — Broadcast Business Practices 3 Units
54 hours of 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.

Section 10 201
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R-TV 16 — Broadcast Career Preparation</strong> 3 Units</td>
<td></td>
<td>Degree Appropriate 54 hours of 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.</td>
</tr>
<tr>
<td><strong>R-TV 17 — Internet Radio Broadcasting</strong> 3 Units</td>
<td></td>
<td>Degree Appropriate 54 hours of lecture. Corequisite: R-TV 01, R-TV 10, and R-TV 11A (May have been taken previously) Covers all aspects of internet broadcasting including programming, announcing, promotions and legal and copyright issues through the use of an actual internet radio station.</td>
</tr>
<tr>
<td><strong>R-TV 18 — Writing for Television/Film</strong> 3 Units</td>
<td></td>
<td>Degree Appropriate 54 hours of lecture. Advisory: R-TV 01 Characterization, visualization, structure and form in various types of writing for television and motion picture production.</td>
</tr>
<tr>
<td><strong>R-TV 19A — Beginning Television Production</strong> 3 Units</td>
<td></td>
<td>Degree Appropriate, CSU 36 hours of lecture. 54 hours of lab. Corequisite: R-TV 01 (May have been taken previously) Basic video production using studio, remote multicamera, and film-style techniques.</td>
</tr>
<tr>
<td><strong>R-TV 19B — Advanced Television Production</strong> 3 Units</td>
<td></td>
<td>Degree Appropriate, CSU 36 hours of lecture. 54 hours of lab. Prerequisite: R-TV 19A Advanced video production techniques emphasizing film-style aesthetics and production.</td>
</tr>
<tr>
<td><strong>R-TV 19D — Advanced Television Production</strong> 3 Units</td>
<td></td>
<td>Degree Appropriate, CSU 36 hours of lecture. 54 hours of lab. Prerequisite: R-TV 19A Advanced video production techniques emphasizing film-style aesthetics and production.</td>
</tr>
<tr>
<td><strong>R-TV 20 — Television News Production</strong> 3 Units</td>
<td></td>
<td>Degree Appropriate 54 hours of lecture. 18 hours of lab. Prerequisite: R-TV 05 or R-TV 11A or R-TV 19A Advisory: JOUR 111 or JOUR 25 TV newscasting 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><strong>R-TV 21 — Remote Television Production and Engineering</strong> 3.5 Units</td>
<td></td>
<td>Degree Appropriate 54 hours of lecture. 36 hours of lab. 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><strong>R-TV 22 — Electronic Graphics and Non-Linear Editing</strong> 3 Units</td>
<td></td>
<td>Degree Appropriate 54 hours of lecture. Use of non-linear editors, computer graphics hardware and software for television.</td>
</tr>
<tr>
<td><strong>R-TV 23 — Legal Issues in Entertainment Law</strong> 3 Units</td>
<td></td>
<td>Spring Semester Degree Appropriate 54 hours of lecture. Advisory: R-TV 01 or BUSL 30 Overview of the major legal and FCC regulatory issues facing broadcasting, cable and developing media. Also covers the growing importance of intellectual property law as it applies to digital media and the Internet.</td>
</tr>
<tr>
<td><strong>R-TV 24 — Radio Drama</strong> 3 Units</td>
<td></td>
<td>Spring Semester Degree Appropriate 54 hours of 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><strong>R-TV 25 — Radio/Entertainment Industry Seminar</strong> 1 Unit</td>
<td></td>
<td>Degree Appropriate 18 hours of lecture. Prerequisite: R-TV 01 and any other three R-TV units Corequisite: R-TV 97B 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><strong>R-TV 26 — Radio/Entertainment Industry Internship</strong> 1 Unit</td>
<td></td>
<td>Degree Appropriate 75 hours of lab. Prerequisite: R-TV 01 and any other 3 R-TV units Corequisite: R-TV 97A 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 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>R-TV 97C — Entertainment Industry Internship – KSAK Radio</strong> 1 Unit</td>
<td></td>
<td>Degree Appropriate 75 hours of lab. Prerequisite: R-TV 11A Corequisite: R-TV 01 and R-TV 02 (May have been taken previously) Regular and continuing experience in the operation of the college radio station, KSAK. Students may select roles in the radio operation involving on-air announcing, production, programming and news. A minimum of 75 paid or 60 non-paid 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>R-TV 97D — Entertainment Industry Internship</strong> 2 Units</td>
<td></td>
<td>Degree Appropriate 150 hours of lab. Prerequisite: R-TV 11A Corequisite: R-TV 01 and R-TV 02 (May have been taken previously) Regular and continuing experience in the operation of the college radio station, KSAK. Students may select roles in the radio operation involving on-air announcing, production, programming and news. A minimum of 75 paid or 60 non-paid 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>
R-TV 98A — Television and Film/Entertainment Industry Seminar 1 Unit
(May be taken two times for credit.) Degree Appropriate
18 hours of lecture.
Prerequisite: R-TV 01 and R-TV 19A
Corequisite: R-TV 98B
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.

R-TV 98B — Television and Film/Entertainment Industry Internship 1 Unit
(May be taken two times for credit.) Degree Appropriate
75 hours of lab.
Prerequisite: R-TV 01 and R-TV 19A
Corequisite: R-TV 98A
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.

R-TV 99 — Radio/TV Special Projects 2 Units
(May be taken four times for credit.) Degree Appropriate
36 hours of 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.

RADIOLOGIC TECHNOLOGY

RAD 30 — Radiographic Pathology 1.5 Units
Fall Semester Degree Appropriate
24 hours of lecture.
Corequisite: RAD 63
Concepts of disease and pathological processes demonstrated in diagnostic radiography; etiology; diagnosis, and prognosis of systemic disease processes.

RAD 31 — Fluoroscopy 2 Units
Spring Semester Degree Appropriate
36 hours of lecture.
Corequisite: RAD 64
Components and characteristics of fluoroscopic systems including regulatory requirements for operation. Includes quality control and quality assurance systems relative to radiology.

RAD 50 — Radiologic Technology 3 Units
Summer Semester Degree Appropriate, CSU
54 hours of 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 52 — Techniques of Radiologic Technology 4 Units
Fall Semester Degree Appropriate, CSU
216 hours of lab.
Corequisite: RAD 61A
Practical application of radiographic theories and principles in one of several affiliated hospitals under direct supervision of clinical personnel and college instructor. Emphasis on upper and lower extremities, pelvis, shoulder girdle, chest and darkroom processing.

RAD 52A — Techniques of Radiologic Technology 4.5 Units
Fall Semester Degree Appropriate, CSU
236 hours of lab.
Corequisite: RAD 61A
Practical application of radiographic theories and principles in a hospital setting under direct supervision of clinical personnel and college instructor. Emphasis on chest, upper and lower limbs, from digits to shoulder, and from toes to knee, and abdomen (KUB).

RAD 52B — Techniques of Radiologic Technology 2.5 Units
Winter Semester Degree Appropriate, CSU
140 hours of lab.
Prerequisite: RAD 52A
Continued application of radiographic theories and principles in a hospital setting under direct supervision of clinical personnel and college instructor. Emphasis on upper and lower limbs.

RAD 53 — Techniques of Radiologic Technology 5 Units
Spring Semester Degree Appropriate, CSU
256 hours of lab.
Prerequisite: RAD 52B
Corequisite: RAD 62A
Practical application of radiographic theories and principles in an affiliated hospital under direct supervision of clinical personnel and college instructors. Emphasis on abdominal and thoracic viscera, spine, common contrast exams, and generalized skull radiography.

RAD 54 — Techniques of Radiologic Technology 3 Units
Summer Semester Degree Appropriate, CSU
150 hours of lab.
Prerequisite: RAD 62A
Practical experience in a hospital setting under the supervision 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 55A — Techniques of Radiologic Technology 7 Units
Fall Semester Degree Appropriate, CSU
360 hours of lab.
Prerequisite: RAD 63
Practical experience in an affiliated hospital under guidance of clinical personnel and college instructors. Emphasis on cystograms, urethrograms, foreign body localization, tomography, and venography.

RAD 55B — Techniques of Radiologic Technology 2.5 Units
Winter Semester Degree Appropriate, CSU
140 hours of 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 56 — Techniques of Radiologic Technology 7 Units
Spring Semester Degree Appropriate, CSU
380 hours of lab.
Prerequisite: 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 57 — Techniques of Radiologic Technology 4 Units
Summer Semester Degree Appropriate, CSU (May be taken for Credit/No Credit only.)
232 hours of lab.
Prerequisite: RAD 64
Practical experience as a functioning member of an affiliated hospital under the guidance of clinical personnel and college instructors. Includes exploration of pararadiological imaging modalities and venipuncture instruction.

RAD 61A — Theory of Radiologic Technology 4 Units
Fall Semester Degree Appropriate, CSU 72 hours of lecture.
Prerequisite: RAD 50, MEDI 90
Corequisite: RAD 52, RAD 61B, RAD 61C
Concepts of radiation, fundamentals of the atom, electromagnetic radiation, electricity, and magnetism, electromagnetism, the X-ray machine, and fluoroscopic equipment and procedures.

RAD 61B — Radiographic Positioning 3 Units
Fall Semester Degree Appropriate, CSU 54 hours of 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 hours of lecture.
18 hours of 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 hours of 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 hours of lecture.
Corequisite: RAD 62A
Fundamentals of radiographic positioning of the abdomen, digestive and urinary systems, thorax, vertebral column, general cranial, facial 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 hours of lecture.
18 hours of lab.
Corequisite: 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
Fall Semester Degree Appropriate, CSU 72 hours of lecture.
Prerequisite: RAD 54
Corequisite: RAD 30, RAD 55
Special radiographic studies, contrast media usage, and radiographic pathology. Includes principles of radiation protection and radiobiology.

RAD 64 — Theory of Radiologic Technology 4 Units
Fall Semester Degree Appropriate, CSU 72 hours of 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 91 — Nursing Procedures in Radiologic Technology 2 Units
24 hours of lecture.
24 hours of lab.
Corequisite: RAD 50
Nursing techniques and procedures; provides students with knowledge of proper patient care and management; includes patient transfer, disinfection and/or sterilization, isolation techniques, monitoring vital signs, common emergency situations, and monitoring medical equipment.

RAD 70 — Improving Reading Comprehension 3 Units
(May be taken two times for credit.) Degree Appropriate
Pre-Collegiate
54 hours of lecture.
24 hours of lab.
Prerequisite: Satisfactory score on appropriate placement test
Introduction to reading, comprehension, and vocabulary strategies.
Introduction to self-awareness of reading capabilities. Students who repeat this course will improve skills through further instruction and practice.

READ 65 — Speed Reading: Methods and Applications 1 Unit
18 hours of lecture.
Degree Appropriate, CSU
Designed to increase reading speed, while maintaining comprehension of college-level material. Improves concentration and recall. Develops flexibility in reading rate.
<table>
<thead>
<tr>
<th>COURSE DESCRIPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESD 50 — Theory and Principles of Respiratory Therapy</td>
</tr>
<tr>
<td>Fall Semester</td>
</tr>
<tr>
<td>36 hours of lecture.</td>
</tr>
<tr>
<td>Corequisite: RESD 51A, RESD 52</td>
</tr>
<tr>
<td>Advisory: ANAT 10A, ANAT 10B, CHEM 10, MATH 51 or MATH 59, MEDI 90, taken prior.</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

| RESD 51A — Respiratory Therapy Science | 4 Units |
| Spring Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| 54 hours of lab. |
| Prerequisite: Admission to Respiratory Therapy Program |
| Corequisite: RESD 50, RESD 52 |
| Basic principles of respiratory therapy equipment. Emphasis placed on methods of administration of therapy and application of specialized equipment in the clinical setting. Basic respiratory physiology and oxygen transport. |

| RESD 51B — Respiratory Therapy Science | 4 Units |
| Spring Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| 54 hours of lab. |
| Prerequisite: RESD 50 and RESD 51A |
| Corequisite: RESD 53 and RESD 60 |
| Basic principles of respiratory therapy equipment will be presented. Emphasis placed on principles of administration of therapy and application of specialized equipment in the acute care setting and the application of mechanical ventilation in the clinical setting. |

| RESD 52 — Pulmonary Anatomy and Physiology | 3 Units |
| Fall Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| Corequisite: RESD 51A |
| Anatomy and physiology of the cardiopulmonary, neurological and renal systems emphasizing clinical application of physiological concepts. |

| RESD 53 — Cardiopulmonary Pathophysiology | 3 Units |
| Spring Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| Corequisite: RESD 51B |
| Anatomic alterations of the lungs, etiology, overview of the cardiopulmonary clinical manifestations, and general management of commonly encountered cardiopulmonary diseases. |

| RESD 54 — Respiratory Therapeutic Modalities | 3 Units |
| Fall Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| Corequisite: RESD 56B-1, RESD 55 |
| 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 or/and secondary cardiopulmonary failure. |

| RESD 55 — Adult Respiratory Intensive Care | 3 Units |
| Fall Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| 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 or/and secondary cardiopulmonary failure. |

| RESD 56A-1 — Techniques of Respiratory Therapy | 5 Units |
| Summer Semester | Degree Appropriate, CSU |
| (May be taken for Credit/No Credit only.) |
| 288 hours of lab. |
| Prerequisite: RESD 51B |
| Corequisite: RESD 57 |
| Clinical practice in a hospital setting. The student is expected to perform basic therapeutic modalities mastered in RESD 51A and RESD 51B and apply concepts learned in the first two 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. |

| RESD 56B-1 — Techniques of Respiratory Therapy | 6 Units |
| Fall Semester | Degree Appropriate, CSU |
| (May be taken for Credit/No Credit only.) |
| 324 hours of lab. |
| Prerequisite: RESD 56A-1 |
| Corequisite: RESD 55, RESD 58 |
| Clinical practice in the hospital setting. Introduction to intensive care and mechanical ventilator procedures in the treatment of adult and pediatric patients. |

| RESD 56C-1 — Techniques of Respiratory Therapy | 6 Units |
| Spring Semester | Degree Appropriate, CSU |
| (May be taken for Credit/No Credit only.) |
| 324 hours of lab. |
| Prerequisite: RESD 56B-1 |
| 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 RESD 51B and apply concepts learned in the first four semesters of the Respiratory Therapy Program. |

| RESD 57 — Special Procedures for Respiratory Care | 3 Units |
| Summer Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| Corequisite: RESD 56A-1 |
| Basic application and skills development in respiratory pharmacology, bronchoscopy, blood drawing and analysis, chest drainage, NIPPV, and mechanical ventilation. |

| RESD 58 — Neonatal Intensive Care | 3 Units |
| Fall Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| Corequisite: RESD 56B-1, RESD 55 |
| Emphasizes neonatal pathophysiology, 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. |

| RESD 59 — Respiratory Therapeutic Modalities | 3 Units |
| Spring Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| Corequisite: RESD 56C-1, RESD 61 |
| Advanced practitioner skills development pertinent to the application and function of respiratory therapy equipment with emphasis on the machine-patient interface. |

| RESD 60 — Comprehensive Pulmonary Assessment | 2 Units |
| Spring Semester | Degree Appropriate, CSU |
| 36 hours of lecture. |
| Corequisite: RESD 51B, RESD 53 |
| Techniques of pulmonary assessment including history taking, clinical laboratory data, pulmonary function testing data, chest X-rays, physician exam findings, arterial blood gas data, hemodynamic monitoring data, exhaled gas monitoring data, nutrition, and synopsis of findings; extensive practice in collecting and recording this data. |

| RESD 61 — Current Issues in Respiratory Care | 3 Units |
| Spring Semester | Degree Appropriate, CSU |
| 54 hours of lecture. |
| Corequisite: RESD 56C-1, RESD 59 |
| Explores recently developed health care techniques and strategies for diagnostics, assessment, and therapeutics and their impact on respiratory therapists. |

<table>
<thead>
<tr>
<th>SERVICE LEARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL 1 — Service Learning/Seminar for Health Occupations</td>
</tr>
<tr>
<td>(May be taken four times for credit.)</td>
</tr>
<tr>
<td>Degree Appropriate, CSU</td>
</tr>
<tr>
<td>36 hours of lecture.</td>
</tr>
<tr>
<td>216 hours of lab.</td>
</tr>
<tr>
<td>Prepare students with related experiences in health occupations. Examines and profiles community health care needs. Explores and directly allows students to interface with various patient populations. Weekend and overnight labs to various areas within California may be offered. Out-of-class projects required. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>
Course Descriptions

SL 2 — Linked Service Learning 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lab.
Links service learning with content-specific courses across the college curriculum. Allows students to explore interests or career objectives through community involvement and service. Requires arranged hours of community-based activity. Must be enrolled concurrently in a course with a service learning Link. Students who repeat this course will improve skills through further instruction and practice.

SL 3 — Service Learning/Seminar in Community Involvement 3 Units
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
18 hours of lecture.
Examines and profiles community needs through service learning. Explores and allows students to directly interface with community populations. Permits students the opportunity to explore various career options through community service. Enriches personal and career development through understanding of civic and social issues. Students who repeat this course will improve skills through further instruction and practice.

SL 4 — Service Learning and Community Involvement 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
9 hours of lecture.
27 hours of lab.
Examines and addresses community needs through service learning. Students directly interface with community populations to identify needs and implement activities. Permits exploration of service-oriented career options. Enriches personal and career development through understanding of civic and social issues.

SL 99 — Special Projects in Service Learning 1 Unit
(May be taken four times for credit.) Degree Appropriate, CSU
(May be taken for Credit/No Credit only.)
36 hours of lab.
In order to offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, from time to time various departments 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. Student must have instructor’s authorization before enrolling in this class. Students who repeat this course will improve skills through further instruction and practice.

SIGN LANGUAGE, INTERPRETING

SIGN 99 — Special Projects in Sign Language/Interpreting 2 Units
(May be taken three times for credit.) Degree Appropriate
36 hours of lecture.
Prerequisite: SIGN 81 or equivalent signing ability
Offers students the opportunity to explore American Sign Language, American Deaf Culture or Sign Language Interpreting in greater depth. Content and methods of study vary from semester to semester and depend on the particular project under consideration.

SIGN 101 — American Sign Language 1 4 Units
Formerly SIGN 80
72 hours of lecture.
Prerequisite: Eligibility for ENGL 68
Fundamentals of American Sign Language: Preparation for visual/gestural communication followed by intensive work on comprehension skills; modeling of grammatical structures; general information about Deaf Culture.

SIGN 102 — American Sign Language 2 4 Units
Formerly SIGN 81
72 hours of lecture.
Prerequisite: SIGN 80 or SIGN 101 or equivalent fluency
Further study of fundamentals of ASL: comprehension skills, grammatical structures and practice in the expressive aspects of the language, as well as exposure to Deaf culture.

SIGN 103 — American Sign Language 3 4 Units
Formerly SIGN 82A
72 hours of lecture.
Prerequisite: SIGN 81 or SIGN 102
Advisory: SIGN 83 or SIGN 201
Further study of American Sign Language: Comprehension skills, advanced grammatical structures, and continued emphasis on expressive skills in narrative and aspects of Deaf culture.

SIGN 104 — American Sign Language 4 4 Units
Formerly SIGN 82B
72 hours of lecture.
Prerequisite: SIGN 82A or SIGN 103
Advisory: SIGN 85 or SIGN 202
Emphasis on expressive/conversational skills in ASL along with continued focus on grammatical and cultural features.

SIGN 105 — American Sign Language 5 4 Units
Formerly SIGN 82C
(May be taken two times for credit.)
72 hours of lecture.
Prerequisite: SIGN 82B or SIGN 104

SIGN 106 — American Sign Language 6 4 Units
Formerly SIGN 82D
72 hours of lecture.
Prerequisite: SIGN 82C or SIGN 105
Advisory: SIGN 83 or SIGN 201
Further study of American Sign Language: Language use in a variety of contexts, while incorporating more complex, professional situations.

SIGN 201 — Deaf Perspectives 3 Units
Formerly SIGN 83
54 hours of lecture.
Comprehensive study of Deaf people throughout their lives, including points of view from a variety of Deaf and hard-of-hearing people and from their relatives, educators, and other professionals in the field.

SIGN 202 — American Deaf Culture 3 Units
Formerly SIGN 85
54 hours of lecture.
American Deaf cultural norms, values, mores and institutions.

SIGN 203 — American Sign Language Structure 3 Units
Formerly SIGN 86
54 hours of lecture.
Prerequisite: SIGN 82A or SIGN 103 and SIGN 86 or SIGN 210
Linguistic structure of American Sign Language, including phonology, morphology and syntax. Sociolinguistic issues will also be discussed.

SIGN 210 — American Sign Language Structure 3 Units
Formerly SIGN 86
54 hours of lecture.
Prerequisite: SIGN 81 or SIGN 102
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
Formerly SIGN 87
54 hours of lecture.
Prerequisite: SIGN 82A or SIGN 103 and SIGN 86 or SIGN 210
Practice in translating between American Sign Language and English by comparing texts in both languages. Students who repeat this course will improve skills through further instruction and practice.

SIGN 230 — Principles of Interpreting 3 Units
Formerly SIGN 88
54 hours of lecture.
Corequisite: SIGN 82B or SIGN 104 (May have been taken previously)
Covers various aspects of interpreting theory and process including the history of sign language interpreting. Examines the interpreter’s role and ethical standards.
### SIGN 231 — Interpreting
4 Units
Formerly SIGN 88A
Degree Appropriate
(May be taken three times for credit.)
72 hours of lecture.
Prerequisite: SIGN 82B or SIGN 104, SIGN 87 or SIGN 220, and SIGN 88 or SIGN 230
Advisory: SPCH 1A
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 the next interpreting course.

### SIGN 232 — Advanced Interpreting
4 Units
Formerly SIGN 88B
Degree Appropriate
(May be taken three times for credit.)
72 hours of lecture.
Prerequisite: SIGN 88A or SIGN 231
Refines basic 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 239 — Practicum
1 Unit
Formerly SIGN 88L
Degree Appropriate
(May be taken for Credit/No Credit only.)
54 hours of lab.
Prerequisite: SIGN 88B or SIGN 232
Develops and hones interpreting skills in supervised interpreting situations.

### SOC 1 — Sociology
3 Units
54 hours of 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 hours of 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.

### SOC 2 — Sociology
3 Units
(CAN SOC 4)
54 hours of lecture.
Prerequisite: SOC 1
Advisory: Eligibility for ENGL 1A or SPCH 1A
The application of basic sociological principles and concepts to the study and understanding 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.

### SOC 2H — Sociology – Honors
3 Units
(CAN SOC 4)
54 hours of lecture.
Prerequisite: Acceptance into the Honors Program
The application of basic sociological principles and concepts to the study and understanding 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 for accelerated students. Students may not receive credit for both SOC 2 and SOC 2H.

### SOC 4 — Introduction to Gerontology
3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
Characteristics, contributions, and problems of older persons. Emphasizes the theoretical perspectives on the process of aging. Topics include gender, race, ethnicity, religion, stratification, and health care. Attention is given to gerontology as an academic discipline and a field of practice.

### SOC 5 — Introduction to Criminology
3 Units
54 hours of lecture.
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.

### SOC 14 — Marriage and the Family
3 Units
(CAN FCS 12)
54 hours of lecture.
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 "successful" marriages and families.

### SOC 15 — Child Development
3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
Theoretical aspects of physical, social, emotional and cognitive development from conception through adulthood. Requires observation of children. Meets the requirements for Title 22 and Title 5 California Children's Center Instructional Permit.

### SOC 20 — Sociology of Ethnic Relations
3 Units
54 hours of lecture.
Degree Appropriate, CSU, UC
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.

### SOC 20H — Sociology of Ethnic Relations – Honors
3 Units
54 hours of lecture.
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. An honors course designed to provide an enriched experience. Students may not receive credit for both SOC 20 and SOC 20H.

### SOC 99 — Special Projects in Sociology
2 Units
(May be taken four times for credit.)
Degree Appropriate, CSU, UC
36 hours of lecture.
Offers selected students recognition for their academic interests and ability and the opportunity to explore their disciplines to greater depth, as 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 the proficiencies are enhanced.
Course Descriptions

SPANISH

SPAN 1 — Elementary Spanish 4 Units
(CAN SPAN 2) Degree Appropriate, CSU, UC
72 hours of lecture.
Prerequisite: None
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.

SPAN 2 — Continuing Elementary Spanish 4 Units
(CAN SPAN 4) Degree Appropriate, CSU, UC
72 hours of lecture.
Prerequisite: SPAN 1 or SPAN 1H 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.

SPAN 3 — Intermediate Spanish 4 Units
(May be taken for option of letter grade or Credit/No Credit.)
72 hours of 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.

SPAN 3H — Intermediate Spanish – Honors 4 Units
(CAN SPAN 8) Degree Appropriate, CSU, UC
72 hours of lecture.
Prerequisite: Acceptance into the Honors Program
Further development of communicative proficiency with increasing emphasis on reading and writing as tools in exploring Hispanic history and culture. Review and expansion of vocabulary and structural components. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both SPAN 3 and SPAN 3H.

SPAN 4 — Continuing Intermediate Spanish 4 Units
(CAN SPAN10) Degree Appropriate, CSU, UC
72 hours of 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.

SPAN 5 — Advanced Spanish 4 Units
(May be taken for option of letter grade or Credit/No Credit.)
72 hours of 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.

SPAN 6 — Continuing Advanced Spanish 4 Units
(May be taken for option of letter grade or Credit/No Credit.)
72 hours of 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.

SPAN 11 — Spanish for the Spanish Speaking 4 Units
72 hours of lecture.
Degree Appropriate, CSU, UC
Prerequisite: SPAN 11 or equivalent
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.

SPAN 12 — Continuing Spanish for the Spanish Speaking 4 Units
72 hours of lecture.
Degree Appropriate, CSU, UC
Prerequisite: SPAN 11 or equivalent
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.

SPAN 13 — Conversational Spanish 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
Degree Appropriate
Prerequisite: SPAN 3 or SPAN 3H or four years of high school Spanish or equivalent
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.

SPAN 14 — Continuing Conversational Spanish 3 Units
(May be taken for option of letter grade or Credit/No Credit.)
54 hours of lecture.
Prerequisite: SPAN 13
Development of advanced Spanish conversational skills. Emphasis on collaborative activities and practical use of the language. Extensive exposure to Hispanic culture. Grammar is presented in context.

SPAN 25 — Spanish Literature 3 Units
Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: SPAN 4 or equivalent
Teaches the student to elicit basic information and answer simple questions in Spanish related to everyday situations in law enforcement and fire science. Upon completion, the student will be able to talk to Spanish speakers about routine matters, such as family and job related conditions.

SPCH 1A — Public Speaking 3 Units
(CAN SPCH 4) Degree Appropriate, CSU, UC
54 hours of lecture.
Prerequisite: Eligibility for ENGL 1A
Study and apply rhetorical principles to research and analyze topics, organize sentence outlines, and deliver effective public speeches. Students perform speaking and listening assignments that utilize effective verbal, vocal and physical communicative strategies and critical/analytical techniques.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 1AH</td>
<td>Public Speaking – Honors</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Prerequisite: Acceptance into the Honors Program Study and apply rhetorical principles to research and analyze topics, organize sentence outlines, and deliver effective public speeches. Perform speaking and listening assignments that utilize effective verbal, vocal, and physical communicative strategies and critical/analytical techniques. An honors course designed to provide an enriched experience. Students may not receive credit for both SPCH 1A and SPCH 1AH.</td>
</tr>
<tr>
<td>SPCH 1B</td>
<td>Advanced Public Speaking</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Prerequisite: SPCH 1A or SPCH 1AH 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>
</tr>
<tr>
<td>SPCH 3</td>
<td>Voice and Diction</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC (May be taken for option of letter grade or Credit/No Credit.) 54 hours of lecture. 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>
</tr>
<tr>
<td>SPCH 4</td>
<td>Oral Interpretation of Literature</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Develops an appreciation of various genres of literature through textual analysis, oral reading, and evaluation. Practical training is given in critical reading, editing, and performance of poetry, prose, drama, essay and experimental forms of performance text.</td>
</tr>
<tr>
<td>SPCH 5</td>
<td>Readers Theater</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Prerequisite: SPCH 1A or SPCH 1AH or SPCH 4 Theory, principles, and techniques of the interpretation of literature in the medium of readers theater. There is programming and presentation of prose, poetry and drama by an ensemble of readers. Emphasis is placed on experimental presentations and on the development of analytical insight into literary forms.</td>
</tr>
<tr>
<td>SPCH 6</td>
<td>Small Group Communication</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Corequisite: SPCH 1A or SPCH 1AH (May have been taken previously) Principles of communication in a variety of small group contexts. Theory, application and evaluation of group communication processes, including problem solving, conflict management, decision making, and leadership.</td>
</tr>
<tr>
<td>SPCH 7</td>
<td>Intercultural Communication</td>
<td>3</td>
<td>Degree Appropriate, CSU 54 hours of lecture. Introduction to intercultural communication in domestic and/or global contexts. Influence of cultures, languages, and social patterns on how members of groups relate among themselves and with members of different ethnic and cultural groups. Theory and application of effective communication across cultures. Appreciation of diverse cultural voices.</td>
</tr>
<tr>
<td>SPCH 15</td>
<td>Forensics: Contest Speech and Debate</td>
<td>2</td>
<td>Degree Appropriate, CSU 18 hours of lecture. 54 hours of lab. Advisory: SPCH 1A or SPCH 1AH Participation in intercollegiate speech tournaments. Instructions in procedures preparatory for these tournaments, including techniques in persuasive oratory, extemporaneous, interpretation, expository, impromptu, discussion, speech analysis, debate. Students have the opportunity to choose area of interest and also an opportunity to participate in public community programs. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>SPCH 16A</td>
<td>Forensics: Individual Event Team</td>
<td>2</td>
<td>Degree Appropriate, CSU 180 hours of activity. Corequisite: SPCH 15 (May have been taken previously) Students develop speech performance skills and participate in multiple intercollegiate speaking competitions, festivals, and/or public events as members of the Mt. SAC Forensics Team. Emphasis is on individual speaking events, including public address and oral interpretation of literature. Students participate in events as members of the Mt. SAC Forensics Team. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>SPCH 16B</td>
<td>Forensics: Debate Team</td>
<td>2</td>
<td>Degree Appropriate, CSU 180 hours of activity. Corequisite: SPCH 15 (May have been taken previously) Students develop speaking and argumentation skills and participate in multiple inter-collegiate speaking competitions, festivals, and/or public events as members of the Mt. SAC Forensics Team. Emphasis is on parliamentary debate and extemporaneous speaking. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>SPCH 16C</td>
<td>Forensics: Readers Theater Team</td>
<td>2</td>
<td>Degree Appropriate, CSU 180 hours of activity. Corequisite: SPCH 15 (May have been taken previously) Students develop speech performance skills and participate in multiple intercollegiate speaking competitions, festivals, and/or public events as members of the Mt. SAC Forensics Team. Students who perform in one or more Readers Theater pieces. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>SPCH 19</td>
<td>Argumentation and Debate</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. 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.</td>
</tr>
<tr>
<td>SPCH 20H</td>
<td>Argumentation and Debate – Honors</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. 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 for accelerated students. Students may not receive credit for both SPCH 20 and SPCH 20H.</td>
</tr>
<tr>
<td>SPCH 26</td>
<td>Interpersonal Communication</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Prerequisite: Eligibility for ENGL 68 Enhances ability to communicate on a one-to-one basis. Classroom discussion and group experiences provide skills to cope effectively with varied communication styles and behaviors encountered in family, social or professional setting.</td>
</tr>
<tr>
<td>SPCH 26H</td>
<td>Interpersonal Communication – Honors</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Prerequisite: Acceptance into the Honors Program Enhances the ability to communicate on a one-to-one basis. Classroom discussion and group experiences provide skills to cope effectively with varied communication styles and behaviors encountered in family, social, or professional setting. An honors course designed to provide an enriched experience for accelerated students. Students may not receive credit for both SPCH 26 and SPCH 26H.</td>
</tr>
</tbody>
</table>
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 68</td>
<td>Preparation for Public Speaking</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 108 hours of lecture. Advisory: ENGL 67 or eligibility for ENGL 68 or AMLA 43W. 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.</td>
</tr>
<tr>
<td>SPCH 99</td>
<td>Special Projects in Speech</td>
<td>2</td>
<td>Degree Appropriate, CSU, UC 108 hours of lecture. (May be taken four times for credit.) 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 efficiencies are enhanced.</td>
</tr>
<tr>
<td>STDY 80</td>
<td>Studying and Learning: Foundations for Success</td>
<td>3</td>
<td>Degree Appropriate, Pre-Collegiate 54 hours of lecture. Advisory: Eligibility for ENGL 67 or READ 80 Provides a foundation for life-long learning that promotes greater self-awareness and success. Academic success strategies include text management, time management, listening, note taking, oral and written communication, test-taking, memorization, use of campus resources, and research methods.</td>
</tr>
<tr>
<td>STDY 85</td>
<td>Focused Study Techniques</td>
<td>1</td>
<td>Degree Appropriate, CSU, UC 18 hours of lecture. Advisory: Eligibility for ENGL 67. A single purpose course designed to support learning in either an academic field or in a vocation. Provides support in any one of the following: test taking, research process, time management, team building, methods of learning, memory, concentration, listening, note-taking, textbook reading strategies, or motivation. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
<tr>
<td>STDY 100</td>
<td>Student Achievement and Fundamentals</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC 54 hours of lecture. Advisory: Eligibility for ENGL 68 or READ 100 Designed to increase student success in transfer college level courses. Provides a systematic approach to advanced study techniques for academic success in higher education. Develops the steps leading to successful transfer/transition to four-year institutions or careers.</td>
</tr>
<tr>
<td>SURV 1A</td>
<td>Surveying</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 36 hours of lecture. (May be taken for option of letter grade or Credit/No Credit.) 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 of systematic and random errors; stadia surveying; mapping.</td>
</tr>
<tr>
<td>SURV 1B</td>
<td>Surveying</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 36 hours of lecture. (May be taken for option of letter grade or Credit/No Credit.) 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 of systematic and random errors; stadia surveying; mapping.</td>
</tr>
<tr>
<td>THTR 9</td>
<td>Introduction to Theatre Arts</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 54 hours of lecture. A comprehensive introduction to the theater, including the aesthetic, artistic, technical, and business aspects.</td>
</tr>
<tr>
<td>THTR 10</td>
<td>History of Theatre Arts</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 54 hours of lecture. 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.</td>
</tr>
<tr>
<td>THTR 11</td>
<td>Principles of Acting I</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 54 hours of lecture. (CAN DRAM 8) 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.</td>
</tr>
<tr>
<td>THTR 12</td>
<td>Principles of Acting II</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 54 hours of lecture. (CAN DRAM 22) 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.</td>
</tr>
<tr>
<td>THTR 14</td>
<td>Stagecraft</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 54 hours of lecture. (CAN DRAM 12) 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.</td>
</tr>
<tr>
<td>THTR 15</td>
<td>Play Rehearsal and Performance</td>
<td>2</td>
<td>Degree Appropriate, CSU, UC, UC 108 hours of 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.</td>
</tr>
<tr>
<td>THTR 16</td>
<td>Theatrical Make-Up</td>
<td>2</td>
<td>Degree Appropriate, CSU, UC, UC 36 hours of lecture. 36 hours of lab. 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>
</tbody>
</table>

### STUDENT GOVERNMENT

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STGV 55</td>
<td>Student Government</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 36 hours of lecture. (May be taken four times for credit.) Teaches leadership skills and provides practical experience in program planning, organization and evaluation. Students may or may not serve in elected or appointed campus positions. Several learning opportunities are offered and students are assisted in selecting learning opportunities and projects. Students who repeat this course will improve skills through further instruction and practice.</td>
</tr>
</tbody>
</table>

### STUDY TECHNIQUES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV 1A</td>
<td>Surveying</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 36 hours of lecture. (May be taken for option of letter grade or Credit/No Credit.) 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 of systematic and random errors; stadia surveying; mapping.</td>
</tr>
<tr>
<td>SURV 1B</td>
<td>Surveying</td>
<td>3</td>
<td>Degree Appropriate, CSU, UC, UC 36 hours of lecture. (May be taken for option of letter grade or Credit/No Credit.) 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 of systematic and random errors; stadia surveying; mapping.</td>
</tr>
<tr>
<td>THTR 11</td>
<td>Principles of Acting I</td>
<td>3</td>
<td>(CAN DRAM 8) 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.</td>
</tr>
<tr>
<td>THTR 12</td>
<td>Principles of Acting II</td>
<td>3</td>
<td>(CAN DRAM 22) 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.</td>
</tr>
<tr>
<td>THTR 14</td>
<td>Stagecraft</td>
<td>3</td>
<td>(CAN DRAM 12) 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.</td>
</tr>
<tr>
<td>THTR 15</td>
<td>Play Rehearsal and Performance</td>
<td>2</td>
<td>Degree Appropriate, CSU, UC, UC 108 hours of 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.</td>
</tr>
<tr>
<td>THTR 16</td>
<td>Theatrical Make-Up</td>
<td>2</td>
<td>Degree Appropriate, CSU, UC, UC 36 hours of lecture. 36 hours of lab. 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>
</tbody>
</table>
THTR 17 — Acting for Television 3 Units
54 hours of 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, sit-coms, news, commercials.

THTR 18 — Technical Theater Practicum 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 hours of 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 two times for credit.) Degree Appropriate, CSU, UC
36 hours of lecture. 54 hours of lab.
Theatrical costuming design and construction. Includes the study of costume history, principles of costume design, fabrics 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 20 — Theatrical Playwriting 3 Units
36 hours of lecture. Degree Appropriate, CSU
Prerequisite: THTR 14
Playwriting for the stage. Students will create and critique their own plays, as well as study and critique plays from well known authors and productions. Includes basics of linear, broken linear, episodic, ‘A’-’B’ and ritual structures.

THTR 21 — Technical Theater Practicum 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 hours of 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 60 — Children’s Theatre 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.) 36 hours of lecture. 72 hours of lab.
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.

THTR 99 — Special Projects in Theatre 2 Units
(May be taken four times for credit.) Degree Appropriate, CSU
36 hours of lecture. To offer selected students recognition for their academic interests and ability and the opportunity to explore their disciplines in 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.

TRAN 17 — Air Transportation 3 Units
54 hours of lecture. Degree Appropriate, CSU
Advisory: AERO 23
Regulatory agencies and legislation within the airlines and general aviation. Structure and economic characteristics of the airline industry. Aviation career planning.

TRAN 19 — Air Law and Regulation 2 Units
36 hours of lecture. Degree Appropriate
Regulations and liabilities of public and private air carriers. Domestic and foreign air law. Current law and anticipated changes.

WATR 60 — Introduction to Water Systems 3 Units
54 hours of lecture. 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. Distribution systems, wells, valves and pumps. Prepares the student for Grade I and II State Water Treatment Operator Certification and Grade I AWWA Water Distribution Operator Certification.

WATR 61 — Water Treatment 3 Units
54 hours of lecture. Degree Appropriate
Water mathematics and State Health Department Title 22, Water Quality Standards. Prepares students for the Grade II and III State Water Treatment Operator Certification.
## Course Descriptions

### WATR 62 — Water Distribution 3 Units
54 hours of lecture. Degree Appropriate
Advisory: WATR 60 taken prior
Water distribution systems operation, administration, safety, maintenance, introduction to Cross-connection Control Title 17. Prepares student for Grade II and III AWWA Distribution Operator Certification.

### WATR 63 — Cross Connection Control – Certified Tester 3 Units
54 hours of 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 hours of 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 hours of lecture. Degree Appropriate
Advisory: WATR 60 taken prior
Practical water supply hydraulics and instrumentation, with emphasis on system distribution capacity, hydraulic analysis, pumping analysis, customer service lines and meters, automation, instrumentation and control, system maintenance and records.

### WELD 30 — Metal Sculpture 2 Units
(May be taken two times for credit.) Degree Appropriate, CSU
18 hours of lecture. 54 hours of lab.
For students interested in art seeking the proper operation of welding processes related to the sculpturing industry. Emphasizes the fundamentals of three-dimensional design. Includes demonstrations and exercises in welding as it relates to the art industry. Students who repeat this course will improve skills through further instruction and practice.

### WELD 40 — Introduction to Welding 2 Units
18 hours of lecture. Degree Appropriate, CSU
54 hours of lab.
Fundamentals of welding processes related to the areas of fabrication, construction, machine tool, aerospace and the transportation industries.

### WELD 50 — Oxyacetylene Welding 2 Units
18 hours of lecture. Degree Appropriate
54 hours of lab.
Oxyacetylene fusion welding, non-fusion welding and cutting. Develops understanding of and fundamental skills in modern welding practices.

### WELD 51 — Basic Electric Arc Welding 2 Units
18 hours of lecture. Degree Appropriate
54 hours of lab.
Advisory: WELD 50
Basic electric arc welding, weld symbols, standard electrode and alloy electrode selection, American Welding Society (A.W.S.) procedure for certification.

### WELD 53A — Welding Metallurgy 3 Units
54 hours of lecture. Degree Appropriate, CSU
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.

### WELD 60 — Print Reading and Computations for Welders 3 Units
54 hours of lab. Non-Degree Credit
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.

### WELD 70A — Beginning Arc Welding 3 Units
18 hours of lecture. Degree Appropriate
108 hours of lab.
Develops 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 flat and horizontal positions using AC and DC welding currents on carbon steel.

### WELD 70B — Intermediate Arc Welding 3 Units
18 hours of lecture. Degree Appropriate
108 hours of lab.
Advisory: WELD 70A taken prior
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.

### WELD 70C — Certification for Welders 3 Units
(May be taken two times for credit.) Degree Appropriate
18 hours of lecture. 108 hours of lab.
Advisory: WELD 70A taken prior
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.

### WELD 81 — Pipe and Tube Welding 3 Units
(May be taken two times for credit.) Degree Appropriate
18 hours of lecture. 108 hours of lab.
Advisory: WELD 70B taken prior
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. Students who repeat this course will improve skills through further instruction and practice.

### WELD 90A — Gas Tungsten Arc Welding 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
18 hours of lecture. 108 hours of lab.
Advisory: WELD 70B taken prior
Advanced level class in Gas Tungsten Arc Welding (GTAW, also known as TIG) of steel, aluminum, CRSS and exotic metals. All position welds with many surfaces and transitions.

### WELD 90B — Semiautomatic Arc Welding Processes 3 Units
(May be taken two times for credit.) Degree Appropriate, CSU
(May be taken for option of letter grade or Credit/No Credit.)
18 hours of lecture. 108 hours of lab.
Advisory: WELD 70B taken prior
An integrated review of Semiautomatic Welding Processes including Gas Metal Arc Welding (GMAW), Flux Cored Arc Welding (FCAW), Submerged Arc Welding (SAW) with solid and tubular wires with and without gas shielding. All position welds with many varying thickness will be covered.
WELD 91 — Automotive Welding, Cutting and Modification 3 Units  
Non-Degree Credit  
(May be taken for option of letter grade or Credit/No Credit.)  
18 hours of lecture.  
108 hours of lab.  
Advisory: WELD 70B taken prior  
Instruction in the art of welding and cutting on metals commonly used in the automotive industry. Gas Metal Arc (MIG), Gas Tungsten Arc (GTAW), Plasma Arc cutting and oxyfuel cutting and welding will be covered.

WELD 96 — Work Experience in Welding 1 Unit  
(May be taken four times for credit.)  
Degree Appropriate  
(May be taken for Credit/No Credit only.)  
75 hours of lab.  
Prerequisite: Compliance with work experience regulations as designated in the college catalog  
Advisory: WELD 70B  
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.

WELD 97 — Work Experience in Welding 2 Units  
(May be taken four times for credit.)  
Degree Appropriate  
(May be taken for Credit/No Credit only.)  
150 hours of lab.  
Prerequisite: Compliance with work experience regulations as designated in the college catalog  
Advisory: WELD 70B  
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.

WELD 98 — Work Experience in Welding 3 Units  
(May be taken four times for credit.)  
Degree Appropriate  
(May be taken for Credit/No Credit only.)  
225 hours of lab.  
Prerequisite: Compliance with work experience regulations as designated in the college catalog  
Advisory: WELD 70B  
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.

WELD 99 — Work Experience in Welding 4 Units  
(May be taken four times for credit.)  
Degree Appropriate  
(May be taken for Credit/No Credit only.)  
300 hours of lab.  
Prerequisite: Compliance with work experience regulations as designated in the college catalog  
Advisory: WELD 70B  
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.
Section 11
Community Education
**COMMUNITY EDUCATION DIVISION**

The Community Education Division provides a broad range of courses serving students and community members. For students 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 (ESL), Health & Safety, Programs for Adults with Disabilities, Citizenship, Older Adults, Parenting, and Short-term Vocational Programs.

**Student Services**

Admissions and Registration

For Community Education (noncredit) and Community Services (fee-based) courses, admission and registration are 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 term, on a space available basis. Noncredit and fee-based courses 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 assessment of 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 by appointment 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

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 adult education courses. However, some courses include a fee for materials provided to students. Community Services (fee-based) courses are not supported by State funding and require a student registration fee and occasionally a material fee to cover course supplies/handouts. In addition, students who park on the Mt. San Antonio College campus must have a valid, current parking permit. Permits may be purchased in 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.

**PROGRAMS AND CENTERS**

**Basic Skills & Special Programs**

This department works with local K-12 districts, county and State agencies to provide programs to populations with special needs and 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 Enrichment 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
- Workforce Investment Act (WIA) programs
- High school and career counseling; educational advising

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

For more information on ESL programs, contact (909) 594-5611, ext. 4580.

Older Adult Program

The Older Adult Program promotes lifelong learning and on-going career skills training by providing a wide range of courses and programs for the older adult population. Classes are offered in the arts, personal growth, physical and mental fitness, and vocational areas. For more information on Older Adult Programs, call (909) 594-5611, ext. 5117.

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 area. Programs are designed to meet specific client needs and are taught by college faculty members as well as industry professionals. For more information, call (909) 468-3933.

Exercise Science/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 should register in the Wellness Center. For more information, contact (909) 594-5611, ext. 4625.

- Contract ESL customized for the workplace
- Career guidance and counseling (Career Guidance Center, ESL Career Conference)

For more information on ESL programs, contact (909) 594-5611, ext. 5235.

Language Learning Center (LLC)

Mt. San Antonio College’s state-of-the-art Language Learning Center provides a lab 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, (south door) 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
- DVDs, videos, audio recordings
- Pronunciation software
- CATS testing for FAA and Chiropractic tests

For more information on the LLC, call (909) 594-5611, ext. 4580.

**Section 11 215**
Community Education

Health Careers Resource Center (HCRC)
The HCRC provides a state-of-the-art learning laboratory 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. Campus programs/departments actively utilizing the Center include:

Technology and Health Division
■ Medical Services – EMT, Paramedic, Physician’s Assistant Prep
■ Mental Health Technology
■ Nursing
■ Radiologic Technology
■ Respiratory Therapy

Community Education
■ Long-Term and Acute Certified Nursing Assistant (CNA)
■ RN Re-Entry into Practice
■ IV Therapy
■ Health Care Interpreting
■ International Health Worker
■ Physical Therapy Aide. For more information, contact (909) 594-5611, ext. 4778

■ Cardio Pulmonary Resuscitation (CPR) Training offering courses such as First Aid, Heartsaver, AED and more
■ Records, rosters and information updates per American Heart Association (AHA) requirements
■ Videos, text, manikins per AHA requirements. For more information, contact (909) 594-5611, ext. 5196.

For more information regarding Community Education services and programs, contact (909) 594-5611, ext. 4220.

Other Community Education Services and Programs
■ Combined credit/noncredit courses and certificates
■ Fee-based programs related to career development and personal enrichment for community members
■ Youth Programs
■ Vehicle Safety Programs (Motorcycle, Traffic School, Driver’s Training)
■ Community education fitness programs
■ Farm Tours
■ Wildlife Sanctuary Tours
■ Planetarium Shows
■ Study Skills Lab for Disabled Students Programs & 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.
College Policies and Notices

**COLLEGE POLICIES**

**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 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.

**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 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 professor 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, 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, religion 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 Office
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 Policy**
It is the policy of the Board of Trustees of Mt. San Antonio College to provide an educational, employment, and business environment free of unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment, as defined and otherwise prohibited by state and federal statutes.

Sexual Harassment is not only unlawful, but it shall be a violation of this policy for any employee, student, agent of the Board, or one who is authorized to transact business or perform other acts or services on behalf of the College to engage in sexual harassment. Any person who knowingly violates this policy will be subject to appropriate and immediate disciplinary action.

**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 11041.5.
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, libellous or slanderous; or which so incites students as to create a clear and present danger of the commission of unlawful acts on College premises, or the violation of lawful College administrative procedures, or the substantial disruption of the orderly operation of the College.
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. An appeal is possible if the student or faculty/staff member chooses to appeal the decision of the Committee. However, the decision made by the president or designee is final.

**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.

**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 and AIDS), sexual orientation, or Vietnam Era Veteran Status. This commitment applies to all aspects of the College’s educational programs and activities and prohibits discrimination against any student, employee, or applicant for employment.

**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 Director, Admissions and Records, 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 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 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 48. 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 campus system consists of emergency phones that are placed 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, O.L. 93-380, 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. The College may release copies of or otherwise disclose material in the student’s educational records to the following persons, 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.

1. Financial records of the parents of the student(s).
2. Confidential letters and statements of recommendation maintained by the College on or before January 1, 1975, provided that such letters or statements are not used for purposes other than those for which they were specifically intended.
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 disclose material in the student’s educational records 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.

3. **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.

**PUBLIC SAFETY DEPARTMENT STATISTICAL CRIME REPORT**

<table>
<thead>
<tr>
<th>Violation</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murder</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rape</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Robbery</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Assault</td>
<td>13</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Weapons Violation</td>
<td>5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Hate Crimes</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Trespass</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Burglary</td>
<td>15</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Burglary-Vehicle</td>
<td>38</td>
<td>19</td>
<td>16</td>
</tr>
<tr>
<td>Theft</td>
<td>84</td>
<td>54</td>
<td>44</td>
</tr>
<tr>
<td>Theft-from Vehicle</td>
<td>7</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Stolen Vehicle (GTA)</td>
<td>14</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Vandalism</td>
<td>21</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Liquor Law Violations</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Illegal Drugs</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Yearly Totals 2003 2004 2005
b. Any student desiring to withhold "Directory Information" may file a written request with the Director, Admissions and Records, 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).

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.

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 (G.E. 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.
3. continuous enrollment is defined as attendance during every regular semester (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 regular semester after initial enrollment at Mt. SAC, he/she:

1. is enrolled in any credit class at Mt. SAC beyond 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 Board of Appeals because of extenuating circumstances.

Student Right-to-Know Rates

| Completion Rate: 26.1% |
| Transfer Rate: 25.9% |

From 1996 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 1996, 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, 26.1 percent attained a certificate or degree or became ‘transfer-prepared’ during a three year period, from Fall 1996 to Spring 1999. Students who are ‘transfer-prepared’ have completed 56 transferable units with a GPA of 2.0 or better.

Based on the cohort defined above, 25.9 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 1999.
Section 13

The Faculty
<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Department</th>
<th>Education</th>
<th>College</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson, Daniel P.</td>
<td>2000</td>
<td>Physics, Engineering</td>
<td>B.S., University of California, Los Angeles</td>
<td>M.S., California State Polytechnic University, Pomona</td>
<td></td>
</tr>
<tr>
<td>Anderson, Richard</td>
<td>1992</td>
<td>Air Conditioning &amp; Welding</td>
<td>A.S., Mt. San Antonio College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anderson-Perry, Carolynn</td>
<td>2004</td>
<td>Nursing</td>
<td>A.S.N., Los Angeles Southwest College</td>
<td>B.S.N., California State University, Dominguez Hills M.S.N., University of Phoenix</td>
<td></td>
</tr>
<tr>
<td>Andrews, Barry</td>
<td>2001</td>
<td>Computer Information Systems</td>
<td>B.S., Indiana University</td>
<td>M.S., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>Andrews, Barry</td>
<td>2001</td>
<td>Computer Information Systems</td>
<td>B.S., Indiana University</td>
<td>M.S., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>Andrade, Renée</td>
<td>1984</td>
<td>Foreign Languages</td>
<td>A.A., Los Angeles City College</td>
<td>B.A., California State University, Los Angeles M.A., Ph.D., University of California, Irvine</td>
<td></td>
</tr>
<tr>
<td>Andrade, Renée</td>
<td>1984</td>
<td>Psychology, Education</td>
<td>B.A., California State University, Los Angeles M.A., Ph.D., University of California, Irvine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbollo, Madelyn A.</td>
<td>1998</td>
<td>Director, Basic Skills</td>
<td>B.A., Pitzer College</td>
<td>M.A., California State University, Los Angeles</td>
<td></td>
</tr>
<tr>
<td>Archibald, Jeffrey D.</td>
<td>2000</td>
<td>Communication</td>
<td>B.A., Cornell University</td>
<td>M.S., Illinois State University</td>
<td></td>
</tr>
<tr>
<td>Arterburn, Pamela</td>
<td>1986</td>
<td>English, Literature &amp; Journalism</td>
<td>B.A., M.A., California State Polytechnic University, Pomona</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arvidson-Perkins, Genene</td>
<td>1988</td>
<td>Nursing</td>
<td>A.S., Mt. San Antonio College</td>
<td>B.S., California State University, Fullerton M.S., California State University, Los Angeles PHN Certificate</td>
<td></td>
</tr>
<tr>
<td>Austin, Jerry D.</td>
<td>2003</td>
<td>Director, Fire Technology</td>
<td>A.A., Santa Ana College</td>
<td>B.V.E., California State University, Long Beach M.A., Chapman University</td>
<td></td>
</tr>
<tr>
<td>Avila, Rocio</td>
<td>2006</td>
<td>English, Literature &amp; Journalism</td>
<td>B.A., California State Polytechnic University, Pomona M.A., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bacigalupi, Stacy</td>
<td>2006</td>
<td>Psychology, Education</td>
<td>B.A., University of California, Santa Barbara M.A., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bartman, Sydney</td>
<td>1986</td>
<td>English, Literature &amp; Journalism</td>
<td>A.A., Mt. San Antonio College</td>
<td>B.A., University of La Verne M.A., University of California, Riverside</td>
<td></td>
</tr>
<tr>
<td>Bauch, Helen L.</td>
<td>1988</td>
<td>Foreign Languages</td>
<td>B.A., St. Louis University</td>
<td>M.A., Bowling Green State University</td>
<td></td>
</tr>
<tr>
<td>Beam, Teresa</td>
<td>1991</td>
<td>Chemistry</td>
<td>B.S., Ohio University</td>
<td>M.S., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>Becker, Liza</td>
<td>1998</td>
<td>Assistant Director, ESL &amp; Intercultural Programs</td>
<td>B.A., California State University, Los Angeles M.S., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beeman, Laura</td>
<td>1996</td>
<td>Physical Education</td>
<td>B.A., California State University, San Bernardino M.A., Azusa Pacific University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blackmore, Deborah L.</td>
<td>1974</td>
<td>Dean, Physical Education</td>
<td>B.S., M.S., California State Polytechnic University, Pomona</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blake-Judd, Jemma</td>
<td>1990</td>
<td>English, Literature &amp; Journalism</td>
<td>B.A., M.A., California State Polytechnic University, Pomona</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blyzka, John V.</td>
<td>2001</td>
<td>Computer Information Systems</td>
<td>B.S., University of California, Irvine        M.S., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birca, Alina</td>
<td>2005</td>
<td>Mathematics, Computer Science</td>
<td>B.A., California State University, Los Angeles M.A., Northwest Missouri State University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boehner-Staylor, Maya</td>
<td>2001</td>
<td>English, Literature &amp; Journalism</td>
<td>B.A., California State University, Los Angeles M.A., California State University, San Bernardino</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borella, Frances</td>
<td>1999</td>
<td>Biological Sciences</td>
<td>A.A., Mt. San Antonio College                 B.S., California State Polytechnic University, Pomona M.A., University of California, Riverside</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boroch, Deborah J.</td>
<td>1990</td>
<td>Associate Dean, Natural Sciences</td>
<td>A.A., Mt. San Antonio College                 B.S., Brigham Young University M.A., California State University, Fullerton Ed.D., University of LaVerne</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boryta, Mark</td>
<td>2001</td>
<td>Earth Sciences, Astronomy</td>
<td>B.A., Amherst College                         M.S., Ph.D., New Mexico Institute of Mining and Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bowen, Melinda</td>
<td>2006</td>
<td>Physical Education/Head Coach, Women’s Soccer</td>
<td>B.A., California State Polytechnic, Pomona M.A., Azusa Pacific University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Year</td>
<td>Degrees/Awards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------</td>
<td>-----------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bowen, Robert</td>
<td>2006</td>
<td>M.A., University of California, Santa Barbara</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bower, Patricia M.</td>
<td>1990</td>
<td>Learning Assistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brackenhoff, Mary</td>
<td>1991</td>
<td>B.A., Southern Illinois University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bradley, Julie</td>
<td>2005</td>
<td>Disabled Student Programs &amp; Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brantingham, John</td>
<td>2002</td>
<td>B.A., University of California, Riverside</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Braver, Lane</td>
<td>1987</td>
<td>Medical Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bray-Ali, Julie</td>
<td>2001</td>
<td>Earth Sciences, Astronomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bro, Glenda</td>
<td>1991</td>
<td>American Language</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brourillette, Ronald</td>
<td>1989</td>
<td>English, Literature &amp; Journalism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown, Ronald</td>
<td>2006</td>
<td>Art, Animation &amp; Broadcasting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burgoon, Steve</td>
<td>2002</td>
<td>Art, Animation &amp; Broadcasting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burnley, Virginia</td>
<td>1986</td>
<td>B.A., California State University, Northridge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burns, Donna</td>
<td>2002</td>
<td>Counseling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burton, Robert E.</td>
<td>1990</td>
<td>Aircraft Maintenance &amp; Manufacturing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butler, Michael C.</td>
<td>1988</td>
<td>Mathematics, Computer Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calkins, Katherine</td>
<td>1974</td>
<td>Music</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calzada, Silver</td>
<td>1999</td>
<td>Counseling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cannon, Steve</td>
<td>2002</td>
<td>Art, Animation &amp; Broadcasting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cannon, Kathleen</td>
<td>2005</td>
<td>History, Art History, Geography, Political Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caputo, Mario V.</td>
<td>1993</td>
<td>Earth Sciences, Astronomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Castellano, Timothy</td>
<td>2006</td>
<td>Earth Sciences, Astronomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Castillejos, Manuel</td>
<td>1989</td>
<td>Foreign Languages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cavion, Deborah</td>
<td>1994</td>
<td>Physical Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chabot, Mary A.</td>
<td>1985</td>
<td>Mathematics, Computer Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chamberlain, Alison</td>
<td>2006</td>
<td>Biological Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chang, Chih-Ping</td>
<td>1997</td>
<td>Foreign Languages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapman, C. Neil</td>
<td>1997</td>
<td>Photographic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chavez, Raul S.</td>
<td>2000</td>
<td>History, Art History, Geography, Political Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chen, Jenny S.</td>
<td>1998</td>
<td>Chemistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chen, Gou-Ling Susie</td>
<td>2003</td>
<td>Nursing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chevalier, Jason</td>
<td>2000</td>
<td>Music</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christopher, Micol</td>
<td>2005</td>
<td>Earth Sciences, Astronomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Churchill, Peter</td>
<td>2005</td>
<td>English, Literature &amp; Journalism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cole, Lois M.</td>
<td>1985</td>
<td>English, Literature &amp; Journalism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condra, Denise</td>
<td>2006</td>
<td>Nursing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cannon, Kathleen</td>
<td>2005</td>
<td>History, Art History, Geography, Political Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caputo, Mario V.</td>
<td>1993</td>
<td>Earth Sciences, Astronomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Castellano, Timothy</td>
<td>2006</td>
<td>Earth Sciences, Astronomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Castillejos, Manuel</td>
<td>1989</td>
<td>Foreign Languages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cavion, Deborah</td>
<td>1994</td>
<td>Physical Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chabot, Mary A.</td>
<td>1985</td>
<td>Mathematics, Computer Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chamberlain, Alison</td>
<td>2006</td>
<td>Biological Sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chang, Chih-Ping</td>
<td>1997</td>
<td>Foreign Languages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapman, C. Neil</td>
<td>1997</td>
<td>Photographic</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Faculty
<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Degree(s)</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooper Mark J.</td>
<td>1997</td>
<td>Biological Sciences</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Coreas, Kelly</td>
<td>2000</td>
<td>Respiratory Therapy</td>
<td>East Los Angeles College</td>
</tr>
<tr>
<td>Davis, R. Gary</td>
<td>1972</td>
<td>M.S., California State Polytechnic University, San Luis Obispo</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Davis, Maria</td>
<td>2005</td>
<td>M.S., California State Polytechnic University, San Luis Obispo</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Daum, Sarah</td>
<td>1998</td>
<td>B.S., University of California, Irvine</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Crane, Barbara N.</td>
<td>1972</td>
<td>B.A., American InterContinental University</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Crespo, Beverly Baker</td>
<td>1980</td>
<td>B.A., M.A., Occidental College</td>
<td>Pacific Oaks College</td>
</tr>
<tr>
<td>Curran, Karen O.</td>
<td>1998</td>
<td>B.S., California State University, Fullerton</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Daland, William</td>
<td>2005</td>
<td>Counseling</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Daum, Sarah</td>
<td>1998</td>
<td>Associate Dean, Technology &amp; Health Division</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Davis, Maria</td>
<td>2005</td>
<td>Family &amp; Consumer Sciences</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Davis, R. Gary</td>
<td>1972</td>
<td>Theater</td>
<td>Occidental College</td>
</tr>
<tr>
<td>Degtyareva, Anna</td>
<td>1999</td>
<td>Computer Information Systems</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Deines, Craig B.</td>
<td>1997</td>
<td>Art, Animation &amp; Broadcasting</td>
<td>Central Washington University</td>
</tr>
<tr>
<td>DePaola, Gina</td>
<td>1991</td>
<td>English, Literature &amp; Journalism</td>
<td>California State University, Long Beach</td>
</tr>
<tr>
<td>Diederichs, Melanie</td>
<td>1991</td>
<td>Family &amp; Consumer Sciences</td>
<td>California State University, Fullerton</td>
</tr>
<tr>
<td>Diem, Andrea</td>
<td>1991</td>
<td>Sociology, Philosophy</td>
<td>University of California, Santa Barbara</td>
</tr>
<tr>
<td>D’Incognito, Patrick</td>
<td>1989</td>
<td>Aircraft Maintenance &amp; Manufacturing</td>
<td>California State University, Fullerton</td>
</tr>
<tr>
<td>Di Mauro, Eileen</td>
<td>1991</td>
<td>Chemistry</td>
<td>University of California, Santa Barbara</td>
</tr>
<tr>
<td>Elmer, John</td>
<td>1991</td>
<td>Chemistry</td>
<td>University of California, Santa Barbara</td>
</tr>
<tr>
<td>Estes, George C.</td>
<td>1973</td>
<td>Agricultural Sciences</td>
<td>California State University, Chico</td>
</tr>
<tr>
<td>Ewald, Anthony</td>
<td>2001</td>
<td>Business Administration</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Ewald, William</td>
<td>2005</td>
<td>Mathematics, Computer Sciences</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Eisley, Benjamin N.</td>
<td>1990</td>
<td>Air Conditioning &amp; Welding</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Elwood, Jeffrey</td>
<td>2006</td>
<td>Music</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Emanuel, Elaine S.</td>
<td>1998</td>
<td>Office Technology</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Engisch, Paulette</td>
<td>2003</td>
<td>Radiologic Technology</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Enke, Gary D.</td>
<td>1990</td>
<td>English, Literature &amp; Journalism</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Esslinger, Sandra</td>
<td>2002</td>
<td>History, Art History, Geography, Political Science</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Estes, George C.</td>
<td>1973</td>
<td>Agricultural Sciences</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Estrada, Maria</td>
<td>2004</td>
<td>English, Literature &amp; Journalism</td>
<td>California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Name</td>
<td>Year</td>
<td>Degree(s)</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Ezzell, Sun</td>
<td>2006</td>
<td>Learning Assistance B.A., M.A., Humboldt State University</td>
<td></td>
</tr>
<tr>
<td>Falzone, Michael</td>
<td>2001</td>
<td>B.A., Art Animation &amp; Broadcasting, M.A., Claremont Graduate University</td>
<td></td>
</tr>
<tr>
<td>Faraone, Teresa M.</td>
<td>1999</td>
<td>Family &amp; Consumer Sciences B.A., M.A., California State University, Los Angeles</td>
<td></td>
</tr>
<tr>
<td>Farris, Bob</td>
<td>1991</td>
<td>Accounting &amp; Management M.S., United States International University</td>
<td></td>
</tr>
<tr>
<td>Farve, Debra</td>
<td>1988</td>
<td>English, Literature &amp; Journalism B.A., Xavier University, M.A., University of Notre Dame Ed.D., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>Falzone, Michael</td>
<td>2001</td>
<td>B.A., San Diego State University</td>
<td></td>
</tr>
<tr>
<td>FioRito, Arleen M.</td>
<td>2000</td>
<td>Nursing B.S., Boston College School of Nursing M.N., University of California, Los Angeles</td>
<td></td>
</tr>
<tr>
<td>Fleischer, Anne</td>
<td>2006</td>
<td>Communication B.A., Texas Tech University M.A., California State University, Long Beach</td>
<td></td>
</tr>
<tr>
<td>Ford, Kelly</td>
<td>2001</td>
<td>Physical Education A.S., Central Arizona College B.S., University of Oklahoma M.Ed., Azusa Pacific University</td>
<td></td>
</tr>
<tr>
<td>Foster, Durrell W.</td>
<td>2004</td>
<td>Director, Student Life B.S. University of California, Davis M.S., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>Frahs, Paul</td>
<td>2004</td>
<td>English, Literature &amp; Journalism B.A., State University College, Potsdam, New York M.A., University of California, Irvine</td>
<td></td>
</tr>
<tr>
<td>Franko, Joseph</td>
<td>2002</td>
<td>Mathematics, Computer Science B.S., Iowa State University M.S., California Polytechnic University, Pomona</td>
<td></td>
</tr>
<tr>
<td>Fulbright Dennis, Wanda</td>
<td>1990</td>
<td>Counseling B.A., Fresno Pacific College M.S., California State University, Los Angeles Ed.D., University of La Verne</td>
<td></td>
</tr>
<tr>
<td>Fuller, Luisa</td>
<td>2001</td>
<td>Learning Assistance B.S., University of San Francisco M.A., Azusa Pacific University</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Degree(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gagnon, Cathy</td>
<td>1987</td>
<td>Medical Services A.A., A.S., Mt. San Antonio College B.S.N., M.S.N., California State University, Dominguez Hills CCRN, CEN, MICN Credentials</td>
</tr>
<tr>
<td>Galbraith, Jennifer</td>
<td>1988</td>
<td>Mathematics, Computer Science A.A., Chaffey College B.S., M.S., California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Garcia, Casimiro</td>
<td>2006</td>
<td>Communication B.S., M.A., University of Texas at Austin</td>
</tr>
<tr>
<td>Gardner, John C.</td>
<td>1975</td>
<td>Mental Health Technology B.A., California State University, Fullerton M.A., Chapman College Ph.D., University of Southern California</td>
</tr>
<tr>
<td>Garrett, Jean</td>
<td>1989</td>
<td>English, Literature &amp; Journalism A.A., Mt. San Antonio College B.A., M.A., California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Garrett, LeAnn</td>
<td>2001</td>
<td>Librarian B.S., University of Wisconsin — Stout M.L.I.S., Ph.D., University of Hawaii, at Manoa</td>
</tr>
<tr>
<td>Gau, Jim</td>
<td>2000</td>
<td>Computer Information Systems B.E., Feng Chia University M.B.A., California Lutheran University</td>
</tr>
<tr>
<td>Goff, Michael</td>
<td>1998</td>
<td>Physical Education A.A., Bakersfield College B.A., M.A., Whittier College</td>
</tr>
<tr>
<td>Gold Wright, Jill Y.</td>
<td>1998</td>
<td>English, Literature &amp; Journalism B.A., University of California, Irvine M.A., Ph.D., Claremont Graduate University</td>
</tr>
<tr>
<td>Gonzalez, Barbara</td>
<td>2002</td>
<td>Learning Assistance A.A., Mt. San Antonio College B.A., M.Ed., University of LaVerne</td>
</tr>
<tr>
<td>Gonzalez, Gail</td>
<td>1999</td>
<td>Mental Health Technology B.S.N., Montana State University</td>
</tr>
<tr>
<td>Graham, Chris Giles</td>
<td>1991</td>
<td>Mathematics, Computer Science B.A., Pomona College M.S., Chadron State College M.S., California State University, Los Angeles Ph.D., Claremont Graduate University</td>
</tr>
<tr>
<td>Greco, Victoria</td>
<td>1999</td>
<td>Disabled Student Programs &amp; Services B.A., California State University, Fullerton M.A., California State University, San Bernardo</td>
</tr>
<tr>
<td>Greenwood, Ralph</td>
<td>1975</td>
<td>History, Art History, Geography, Political Science B.A., M.A., California State University, Los Angeles Ph.D., Northern Arizona University</td>
</tr>
<tr>
<td>Griffith, Hugh M.</td>
<td>1998</td>
<td>Mathematics, Computer Science B.A., University of California, Berkeley M.S., California State University, Los Angeles</td>
</tr>
<tr>
<td>Grimes-Hillman, Michelle</td>
<td>2000</td>
<td>Psychology, Education B.A., M.A., California State University, Fullerton</td>
</tr>
<tr>
<td>Guth, Scott A.</td>
<td>1990</td>
<td>Mathematics, Computer Science A.A., San Bernardino Valley College B.S., M.S., California Polytechnic State University, San Luis Obispo</td>
</tr>
<tr>
<td>Hall, Sushma S.</td>
<td>1990</td>
<td>Sociology, Philosophy B.A., M.A., University of Hawaii</td>
</tr>
<tr>
<td>Hanson, Grace</td>
<td>1996</td>
<td>Director, Disabled Student Programs &amp; Services B.A., M.A., California State University, Long Beach Transition Services for Individual with Disabilities Certificate</td>
</tr>
<tr>
<td>Hatch, Rebecca</td>
<td>2001</td>
<td>Sociology, Philosophy B.A., California Lutheran University M.S., Ph.D., University of Southern California</td>
</tr>
<tr>
<td>Heneise, John W.</td>
<td>1985</td>
<td>Dean, Technology &amp; Health A.S., Long Beach City College B.A., California State University, Long Beach M.Ed., California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Henkins, Kathryn</td>
<td>1987</td>
<td>English, Literature &amp; Journalism B.A., University of Redlands</td>
</tr>
<tr>
<td>Hernandez, Alina</td>
<td>1988</td>
<td>Counseling A.A., Santa Ana Community College B.A., M.A., California State University, Fullerton</td>
</tr>
</tbody>
</table>
The Faculty

Hernandez, Cristina M. (1997)  
History, Art History, Geography, Political Science  
B.A., M.A., University of California, Santa Barbara

Herrera, Irene (2000)  
Director, EOPS  
B.S., California State University, Fullerton  
M.S., California State University, Los Angeles

Hight, Lynette C. (1971)  
English, Literature & Journalism  
B.A., M.A., California State University, Los Angeles

Hill-Enriquez, Evelyn (1991)  
American Language  
A.A., Mt. San Antonio College  
B.A., M.A., California State University, Fullerton  
TESOL Certificate

Hischar, Paul (1998)  
Accounting & Management  
B.S., California State Polytechnic University, Pomona  
M.B.A., West Coast University

Ho, Robert I. (1984)  
Architecture & Engineering Design Technology  
B.S., Cheng Kung University  
M.Arch., University of Minnesota  
NCARB, National Council of Architectural Registration Boards  
California Licensed Architect

Hoffman, Jean (1997)  
Agricultural Sciences  
A.S., Mt. San Antonio College  
B.V.E., California State University, San Bernardino

Hoggan, Lynda Smith (1996)  
Biological Sciences  
B.S., Slippery Rock University  
M.P.H., University of California, Los Angeles

Hoover, Karelyn (1995)  
Chemistry  
B.S., M.S., New Mexico Institute of Mining & Technology

Horton, Tamra (2000)  
English, Literature & Journalism  
B.A., University of California, Davis  
M.A., University of Wyoming  
Ph.D., Louisiana State University

Howell, Lula (2002)  
Foreign Languages  
B.A., M.A., California State University, Sacramento

Huang, Kenneth (2006)  
Chemistry  
M.S., California State University, Long Beach  
Ph.D., University of California, Santa Barbara

Huang, Shui-lieh (1989)  
Computer Information Systems  
M.A., West Texas State University

Hughes-Lederer, Julie (1980)  
Nursing  
A.D.N., Rio Hondo College  
B.S.N., M.S.N., California State University, Los Angeles

Hughes, Douglas (1999)  
Family & Consumer Sciences  
A.A., San Diego City College  
B.A., M.A., Pacific Oaks College

Hymer, Jonathan (2005)  
Electronics & Computer Technology  
B.A., University of California, Davis

Impara, Carol (2005)  
Family & Consumer Sciences  
B.A., Davidson College  
M.S., University of Maryland

Inmon, Carolyn (1992)  
Communication  
B.A., University of California, Los Angeles  
M.A., California State University, Northridge

Jackson, Christopher (2005)  
Physical Education  
B.S., California State University, Fullerton  
M.S., Azusa Pacific University

Jagodka, Ralph F. (1997)  
Accounting & Management  
B.S., Western Illinois University  
M.B.A., Pepperdine University  
Ed.D., University of La Verne

Jastrab, Robert (2001)  
Physical Education  
B.A., University of Miami  
M.S., University of Nevada

Jeffers, Bonnie H. (1997)  
Office Technology  
A.A., Ceritos College  
B.A., M.A., California State University, Fullerton

Jefferson, Paul (2001)  
Public Services  
A.S., Los Angeles City College  
B.S., Pepperdine University  
M.A., John F. Kennedy University

Jenkins, James D. (1992)  
Assoc. Dean, Humanities & Soc. Sciences Division  
B.A., M.A., California State Polytechnic University, Pomona

Director, P.E. & Wellness Programs  
B.S., California State Polytechnic University, Pomona  
M.S., California State University, Fullerton

Johnson, Mary T. (1997)  
Computer Information Systems  
B.A., California State University, Fullerton  
M.S., Azusa Pacific University

Johnson, Michelle (1998)  
Mathematics, Computer Science  
B.S., M.S., University of California, Irvine

Jones, William D. (1992)  
History, Art History, Geography, Political Science  
A.A., Mt. San Antonio College  
B.A., University of California, Los Angeles  
M.A., Ph.D., Claremont Graduate School

Judd, Matthew T. (1990)  
English, Literature & Journalism  
B.A., University of California, Berkeley  
M.A., Claremont Graduate School

K

Biological Sciences  
B.S., M.S., California State University, Los Angeles

Kaljumagi, Eric (1999)  
Learning Assistance  
B.S., University of California, Davis  
M.A.T., University of California, Davis

Kamaka, Ron (2006)  
Physical Education  
B.A., Sonoma State University  
M.S., Azusa Pacific University

Kammerer, Linda (2001)  
Family & Consumer Sciences  
A.A., Orange Coast College  
B.A., M.A., California State University, Long Beach

Karn, Tamara (2001)  
English, Literature & Journalism  
B.A., University of California, Los Angeles  
M.A., Chapman University

Kemp, Kurt A. (2000)  
Foreign Languages  
A.A., Mt. San Antonio College  
B.A., California State University, Fullerton  
M.A., University of California, Los Angeles

Keys, S. Carolyn (2001)  
Dean, Student Services  
B.A., California State University, Fullerton  
M.B.A., National University, La Jolla

Khan, M. Zahir (1990)  
Physics & Engineering  
B.E., University of Poona  
M.S., Ohio State University  
Registered Professional Engineer

Khoddam, Kambiz (1999)  
Mathematics, Computer Science  
B.S., M.A., California State University, Long Beach

Kido, Janine (2005)  
Biological Sciences  
B.A., M.S., California State University, Fullerton
<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Discipline</th>
<th>Institution</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolchakian, Misty</td>
<td>2005</td>
<td>Mathematics, Computer Science</td>
<td>B.S., M.S., California State University, San Diego</td>
<td></td>
</tr>
<tr>
<td>King, Nancy L.</td>
<td>1988</td>
<td>Counseling</td>
<td>B.S., University of California, Los Angeles, M.S., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>King, William F.</td>
<td>1970</td>
<td>History, Art History, Geography, Political Science</td>
<td>A.A., Ventura College</td>
<td>B.A., University of Redlands, M.A., Ph.D., Claremont Graduate School</td>
</tr>
<tr>
<td>Kirchgraber, Albert</td>
<td>1999</td>
<td>Mathematics, Computer Science</td>
<td>B.S., California State Polytechnic University, Pomona</td>
<td></td>
</tr>
<tr>
<td>Kittle, Paul</td>
<td>2004</td>
<td>Librarian</td>
<td>M.A., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>Klawitter, Kenneth</td>
<td>1991</td>
<td>Communication</td>
<td>B.S., Bradley University, Illinois</td>
<td>M.A., Miami University, Ohio, M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>Klawitter, Kenneth</td>
<td>1991</td>
<td>Communication</td>
<td>B.S., Bradley University, Illinois</td>
<td>M.A., Miami University, Ohio, M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>Knapp, Joshua</td>
<td>2000</td>
<td>Psychology, Education</td>
<td>B.A., University of California, Berkeley, Ph.D., University of California, Santa Barbara</td>
<td></td>
</tr>
<tr>
<td>Kohn, Dafna</td>
<td>2001</td>
<td>History, Art History, Geography, Political Science</td>
<td>B.S., Humboldt State University, M.S., California State University, Los Angeles</td>
<td></td>
</tr>
<tr>
<td>Kojima, Tetsuro</td>
<td>2000</td>
<td>Mathematics, Computer Science</td>
<td>B.A., M.S., California State University, Los Angeles, Ph.D., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>Kolichakian, Misty</td>
<td>2005</td>
<td>Psychology, Education</td>
<td>B.S., University of Florida, M.A., Ph.D., University of Maryland, College Park</td>
<td></td>
</tr>
<tr>
<td>Koukol, Laurel A.</td>
<td>1973</td>
<td>Family &amp; Consumer Sciences</td>
<td>A.A., Glendale College</td>
<td>B.A., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>Krider, Terrance M.</td>
<td>1981</td>
<td>Respiratory Therapy</td>
<td>A.S., Washtenaw Community College</td>
<td>B.S., Loma Linda University</td>
</tr>
<tr>
<td>Kunkler, Constance</td>
<td>2006</td>
<td>Nursing</td>
<td>B.S.N., M.S.N., California State University, Dominguez Hills</td>
<td></td>
</tr>
<tr>
<td>Landeros, Darlene</td>
<td>2001</td>
<td>Family &amp; Consumer Sciences</td>
<td>A.A., Rio Hondo Community College</td>
<td>B.A., University of LaVerne, M.A., Pacific Oaks College</td>
</tr>
<tr>
<td>Lane, David C.</td>
<td>1989</td>
<td>Sociology, Philosophy</td>
<td>A.A., Los Angeles Valley Community College</td>
<td>B.A., California State University, Northridge, M.A., Graduate Theological Union, Berkeley, M.A., Ph.D., University of California, San Diego</td>
</tr>
<tr>
<td>Lawlor, Elizabeth</td>
<td>2000</td>
<td>Biological Sciences</td>
<td>A.B., Brown University</td>
<td>M.A., Ph.D., University of California, Riverside</td>
</tr>
<tr>
<td>Lawrence, Helen</td>
<td>1990</td>
<td>Counseling</td>
<td>B.A., Montclair State College, M.S., Hunter College</td>
<td></td>
</tr>
<tr>
<td>Lawson, M. Alan</td>
<td>1990</td>
<td>Business Administration</td>
<td>B.A., University of Utah</td>
<td>M.B.A., California State University, Los Angeles J.D., American College of Law, Brea, California</td>
</tr>
<tr>
<td>Leader, Jennifer</td>
<td>2006</td>
<td>American Language</td>
<td>M.A., Azusa Pacific University, Ph.D., Claremont Graduate University</td>
<td></td>
</tr>
<tr>
<td>Ledeboer, Lisa</td>
<td>2006</td>
<td>Family &amp; Consumer Sciences</td>
<td>B.S., Iowa State University</td>
<td>M.S., California State University, Northridge</td>
</tr>
<tr>
<td>Lee, Eddie</td>
<td>2006</td>
<td>Counseling</td>
<td>B.A., California State Polytechnic, Pomona</td>
<td>M.S., California State University, Long Beach</td>
</tr>
<tr>
<td>Leung, Jenny</td>
<td>2006</td>
<td>Chemistry</td>
<td>B.S., M.S., University of California, Irvine</td>
<td></td>
</tr>
<tr>
<td>Lindberg, Carolyn</td>
<td>1991</td>
<td>Learning Assistance</td>
<td>B.A., University of California, Los Angeles, M.S., Ph.D., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>Lizzaraga, Max</td>
<td>1993</td>
<td>Architecture &amp; Engineering Design Technology</td>
<td>B.A., M.A., California State University, Long Beach</td>
<td></td>
</tr>
<tr>
<td>Lobb, Elizabeth A.</td>
<td>1998</td>
<td>History, Art History, Geography, Political Science</td>
<td>B.A., University of California Berkeley, M.A., University of Washington, Seattle</td>
<td></td>
</tr>
<tr>
<td>Loera-Ramirez Dionne</td>
<td>2001</td>
<td>English, Literature &amp; Journalism</td>
<td>B.A., M.A., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>Long, Gary</td>
<td>1984</td>
<td>Mathematics, Computer Science</td>
<td>B.A., M.A., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>Long, Susan</td>
<td>1998</td>
<td>Dean, Arts Division</td>
<td>B.A., M.A., California State University, Long Beach, Ed.D., Pepperdine University</td>
<td></td>
</tr>
<tr>
<td>Lopez, Audra</td>
<td>2001</td>
<td>Agricultural Sciences</td>
<td>B.S., M.S., California State Polytechnic University, Pomona</td>
<td></td>
</tr>
<tr>
<td>Louie, Charis</td>
<td>2000</td>
<td>Psychology, Education</td>
<td>B.A., Pomona College</td>
<td>M.A., University of Missouri, Ph.D., University of Missouri, Columbia</td>
</tr>
<tr>
<td>Loyd, Rene</td>
<td>1999</td>
<td>Mathematics, Computer Science</td>
<td>A.S., Crafton Hills Community College, B.S., M.S., University of California, Riverside</td>
<td></td>
</tr>
<tr>
<td>Lujan, Angel</td>
<td>1999</td>
<td>Counseling</td>
<td>B.A., M.A., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>McCormick, Elizabeth</td>
<td>1991</td>
<td>English, Literature &amp; Journalism</td>
<td>B.A., Barnard College, M.A., Ph.D., Claremont Graduate University</td>
<td></td>
</tr>
<tr>
<td>McDonald, Christopher</td>
<td>2002</td>
<td>Mathematics, Computer Science</td>
<td>B.A., M.S., California State Polytechnic University, Pomona</td>
<td></td>
</tr>
<tr>
<td>McFarland, Thomas</td>
<td>1997</td>
<td>Accounting &amp; Management</td>
<td>B.S., M.B.A., California Polytechnic University, Pomona</td>
<td></td>
</tr>
<tr>
<td>McFaul, Jason</td>
<td>1999</td>
<td>English, Literature &amp; Journalism</td>
<td>B.A., M.A., University of the Pacific</td>
<td></td>
</tr>
<tr>
<td>McGeeough, Daniel</td>
<td>1986</td>
<td>Accounting &amp; Management</td>
<td>B.A., California State University, Fullerton, M.B.A., California State University, Long Beach, Certified Public Accountant</td>
<td></td>
</tr>
<tr>
<td>McGowan, Richard</td>
<td>1991</td>
<td>Accounting &amp; Management</td>
<td>B.S., San Diego State University, M.B.A., California State Polytechnic University, Pomona, Certified Public Accountant</td>
<td></td>
</tr>
</tbody>
</table>
### The Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Degree(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Faculty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McGraw, Jill</td>
<td>1991</td>
<td>B.V.E., California State University, Long Beach</td>
</tr>
<tr>
<td>McGruder, Charles</td>
<td>1992</td>
<td>Sociology, Philosophy</td>
</tr>
<tr>
<td>Mackey, Richard</td>
<td>2006</td>
<td>B.A., University of Redlands, Johnston College M.A., Ph.D. Claremont Graduate School</td>
</tr>
<tr>
<td>McIntosh, William</td>
<td>1999</td>
<td>Latin</td>
</tr>
<tr>
<td>McKee, Catherine</td>
<td>1995</td>
<td>Business Administration</td>
</tr>
<tr>
<td>McLaughlin, David</td>
<td>1997</td>
<td>Radiologic Technology</td>
</tr>
<tr>
<td>McPhail, Yuki</td>
<td>1992</td>
<td>B.A., Carthage College, Wisconsin</td>
</tr>
<tr>
<td>MacDonald, Jennifer</td>
<td>2001</td>
<td>Program Director, Histologic Technician</td>
</tr>
<tr>
<td>Mackey, Richard</td>
<td>2006</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>Maestro, Patricia</td>
<td>2004</td>
<td>Counseling/Coordinator Learning Communities</td>
</tr>
<tr>
<td>Mageean, Michael</td>
<td>2000</td>
<td>English, Literature &amp; Journalism</td>
</tr>
<tr>
<td>Marano, Americo</td>
<td>1986</td>
<td>Foreign Languages</td>
</tr>
<tr>
<td>Marshall, Cheryl</td>
<td>1999</td>
<td>Interim Associate Dean, Business &amp; Economic Development</td>
</tr>
<tr>
<td>Martin, Douglas</td>
<td>1988</td>
<td>Mathematics, Computer Science</td>
</tr>
<tr>
<td>Mason, Martin</td>
<td>2002</td>
<td>Physics, Engineering</td>
</tr>
<tr>
<td>Masoomian, Rasool</td>
<td>2001</td>
<td>Business Administration</td>
</tr>
<tr>
<td>Maynard, Phillip D.</td>
<td>1990</td>
<td>Communication</td>
</tr>
<tr>
<td>Mbuthi, Stanley W.</td>
<td>1998</td>
<td>Counseling</td>
</tr>
<tr>
<td>Megglin, Nancy</td>
<td>1998</td>
<td>Mental Health Technology</td>
</tr>
<tr>
<td>Mehta, Jai Shri</td>
<td>1999</td>
<td>Computer Information Systems</td>
</tr>
<tr>
<td>Meyer, Elizabetha</td>
<td>2001</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td>Mezaki, Barbara</td>
<td>1990</td>
<td>American Language</td>
</tr>
<tr>
<td>Mezquita, Jesse A.</td>
<td>1977</td>
<td>Sign Language</td>
</tr>
<tr>
<td>Miller, G. Wayne</td>
<td>1981</td>
<td>Computer Information Systems</td>
</tr>
<tr>
<td>Milspaugh, Anita</td>
<td>1980</td>
<td>B.S., B.M.A., California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Mirman, David</td>
<td>2000</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td>Munro, Matthew J.</td>
<td>1998</td>
<td>Mathematics, Computer Science</td>
</tr>
<tr>
<td>Nakamura, Amy Bates</td>
<td>2005</td>
<td>Dance</td>
</tr>
<tr>
<td>Nejad, Iraj Behbahani</td>
<td>1992</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Newman, Charles</td>
<td>2000</td>
<td>Chemistry</td>
</tr>
<tr>
<td>O'Hearn, Christopher</td>
<td>2002</td>
<td>President, CEO</td>
</tr>
<tr>
<td>Ocampo, James</td>
<td>1990</td>
<td>Director, Assessment &amp; Matriculation</td>
</tr>
<tr>
<td>O'Brien, Paul</td>
<td>1999</td>
<td>English, Literature &amp; Journalism</td>
</tr>
<tr>
<td>O'Hearn, Christopher</td>
<td>2002</td>
<td>President, CEO</td>
</tr>
<tr>
<td>O'Hearn, Christopher</td>
<td>2002</td>
<td>Publisher, CEO</td>
</tr>
</tbody>
</table>

*Note: The above table includes faculty members and their respective departments.*
<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Degree</th>
<th>Institution and Location</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olavarria, Rebecca</td>
<td>2000</td>
<td>B.A.</td>
<td>California State University, Los Angeles</td>
<td>Business Administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.S.</td>
<td>Brigham Young University</td>
<td>A.A., Fullerton College</td>
</tr>
<tr>
<td>Olayiwola, Joy</td>
<td>2000</td>
<td>Nursing</td>
<td>Mt. San Antonio College</td>
<td>A.A., Chaffey College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.S.</td>
<td>California State University, Los Angeles</td>
<td>M.A., San Francisco State University, Claremont Graduate School</td>
</tr>
<tr>
<td>Oliva, Jesus F.</td>
<td>2002</td>
<td>Program Director</td>
<td>RHORC</td>
<td>M.Div., St. Johns Theologic Seminary</td>
</tr>
<tr>
<td>Orr, Jondea</td>
<td>2004</td>
<td>Nursing</td>
<td>Rio Hondo College</td>
<td>A.A., California Polytechnic University, Pomona</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.D.N.</td>
<td>Azusa Pacific University</td>
<td>University of California, Fullerton</td>
</tr>
<tr>
<td>Preciado, Rosa M.</td>
<td>1975</td>
<td>Mathematics</td>
<td>Cerritos College</td>
<td>A.A., M.S., California State University, Long Beach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Science</td>
<td>California Polytechnic University, Pomona</td>
<td>Sociology, Philosophy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Fullerton</td>
<td>A.A., M.A., California State University, Riverside</td>
</tr>
<tr>
<td>Pacheco, Henry J.</td>
<td>1974</td>
<td>History, Art History, Geography, Political Science</td>
<td>East Los Angeles College</td>
<td>A.A., Claremont Graduate School</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Los Angeles</td>
<td>B.A., Southern California</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Claremont Graduate School</td>
<td>M.A., Arizona University</td>
</tr>
<tr>
<td>Parre, Heidi R.</td>
<td>1992</td>
<td>Mathematics</td>
<td>Cerritos College</td>
<td>A.A., M.A., California State University, Long Beach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Science</td>
<td>California Polytechnic University, Pomona</td>
<td>Sociology, Philosophy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Fullerton</td>
<td>A.A., M.A., California State University, Riverside</td>
</tr>
<tr>
<td>Peck, Herbert</td>
<td>2002</td>
<td>Aircraft Maintenance &amp; Manufacturing</td>
<td>Fullerton College</td>
<td>English, Literature &amp; Journalism</td>
</tr>
<tr>
<td>Pedersen, Kirk</td>
<td>1998</td>
<td>Art, Animation &amp; Broadcasting</td>
<td>Midland College</td>
<td>B.A., California Polytechnic University, Pomona</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Los Angeles</td>
<td>University of La Verne</td>
</tr>
<tr>
<td>Pelletier, John</td>
<td>1999</td>
<td>Counseling, ESL</td>
<td>California School of Professional Psychology</td>
<td>M.A., California Polytechnic University, Pomona</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California, Santa Barbara</td>
<td>University of Southern California</td>
</tr>
<tr>
<td>Perkins, Robert</td>
<td>2001</td>
<td>Architecture &amp; Engineering Design Technology</td>
<td>Princeton University</td>
<td>Architecture &amp; Engineering Design Technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California Polytechnic University, Pomona</td>
<td>B.S., California Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Petersen, Craig A.</td>
<td>1981</td>
<td>Biological Sciences</td>
<td>California State University, Los Angeles</td>
<td>Counseling, ESL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California Polytechnic University, Pomona</td>
<td>B.A., University of California, Santa Barbara</td>
</tr>
<tr>
<td>Pettit, Lee A.</td>
<td>1972</td>
<td>Agricultural Sciences</td>
<td>California State University, Pomona</td>
<td>M.A., M.S., California State University, Long Beach</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State Polytechnic University, San Luis Obispo</td>
<td>M.S., Northern Arizona University</td>
</tr>
<tr>
<td>Pop, Horia C.</td>
<td>1998</td>
<td>Mathematics, Computer Science</td>
<td>University of Bucharest</td>
<td>Communication, ESL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of Iowa</td>
<td>B.A., Bakersfield College</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Long Beach</td>
<td>B.A., California Polytechnic University, Fresno</td>
</tr>
<tr>
<td>Procaska, Cynthia Adam</td>
<td>1990</td>
<td>English, Literature &amp; Journalism</td>
<td>Fullerton College</td>
<td>Communication, ESL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California, Santa Barbara</td>
<td>B.A., Bakersfield College</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California, Santa Cruz</td>
<td>B.A., California Polytechnic University, Fresno</td>
</tr>
<tr>
<td>Pettey, Lee A.</td>
<td>1972</td>
<td>Agricultural Sciences</td>
<td>California State University, Pomona</td>
<td>B.A., California Polytechnic University, San Luis Obispo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State Polytechnic University, San Luis Obispo</td>
<td>M.A., California State University, Long Beach</td>
</tr>
<tr>
<td>Rausch, Jennifer</td>
<td>2006</td>
<td>Agricultural Sciences</td>
<td>California Polytechnic University, Pomona</td>
<td>B.S., California State Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Riddle, Larry L.</td>
<td>1975</td>
<td>Dean, Natural Sciences Division</td>
<td>San Bernardino Valley College</td>
<td>Dean, Natural Sciences Division</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Long Beach</td>
<td>A.S., San Bernardino Valley College</td>
</tr>
<tr>
<td>Reel, Ron</td>
<td>1988</td>
<td>Communication</td>
<td>Bakersfield College</td>
<td>B.S., California Polytechnic University, Fresno</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Valley Christian University</td>
<td>M.S., California Polytechnic University, Fresno</td>
</tr>
<tr>
<td>Reihart, Liesel</td>
<td>1997</td>
<td>Communication</td>
<td>University of Colorado</td>
<td>B.S., University of Colorado</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cornell University</td>
<td>M.P.S., Cornell University</td>
</tr>
<tr>
<td>Reeves, Carmen</td>
<td>2005</td>
<td>Biological Sciences</td>
<td>University of California, Los Angeles</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Stanislaus</td>
<td>B.A., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California, Davis</td>
<td>B.A., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>Reif, Mary-Ellen</td>
<td>1998</td>
<td>Mental Health Technology</td>
<td>A.A., Chaffey College</td>
<td>Physical Therapy, Philosophy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A.A., M.M., University of Southern California</td>
<td><strong>R</strong></td>
</tr>
<tr>
<td>Rietz, Karol E.</td>
<td>1997</td>
<td>Dance</td>
<td>University of California, Irvine</td>
<td>Dance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Fullerton</td>
<td>B.A., University of California, Irvine</td>
</tr>
<tr>
<td>Robinson, Carolyn</td>
<td>2006</td>
<td>Learning Assistance</td>
<td>California Polytechnic University, Pomona</td>
<td>Learning Assistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of Southern California</td>
<td>B.S., California Polytechnic University, Pomona</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M.S.Ed., University of Southern California</td>
<td>University of Southern California</td>
</tr>
<tr>
<td>Robert, Frank</td>
<td>2002</td>
<td>Sociology, Philosophy</td>
<td>Pasadena City College</td>
<td>Sociology, Philosophy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stanford University</td>
<td>A.A., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>San Diego State University</td>
<td>B.A., University of Southern California</td>
</tr>
<tr>
<td>Robinson, Carolyn</td>
<td>2006</td>
<td>Learning Assistance</td>
<td>California Polytechnic University, Pomona</td>
<td>Learning Assistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of Southern California</td>
<td>B.S., California Polytechnic University, Pomona</td>
</tr>
<tr>
<td>Rodriguez, Raul</td>
<td>1998</td>
<td>Dean, Counseling</td>
<td>California State University, Los Angeles</td>
<td>Dean, Counseling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stanford University</td>
<td>B.A., University of Southern California</td>
</tr>
<tr>
<td>Rogers, Bruce</td>
<td>1994</td>
<td>Music</td>
<td>University of Connecticut</td>
<td>Music</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Claremont Graduate University</td>
<td>A.A., M.A., California State University, Los Angeles</td>
</tr>
<tr>
<td>Rogus, Linda</td>
<td>2005</td>
<td>Aeronautics and Transportation</td>
<td>California State University, Los Angeles</td>
<td>Aeronautics and Transportation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California Polytechnic University, Los Angeles</td>
<td>A.S., Mt. San Antonio College</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California Polytechnic University, Los Angeles</td>
<td>B.S., California State University, Los Angeles</td>
</tr>
<tr>
<td>Rexach, Carmen</td>
<td>2005</td>
<td>Biological Sciences</td>
<td>California State University, Los Angeles</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Stanislaus</td>
<td>B.A., University of California, Los Angeles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California, Davis</td>
<td>B.A., University of California, Davis</td>
</tr>
<tr>
<td>Revell, Timothy</td>
<td>1999</td>
<td>Biological Sciences</td>
<td>University of California, Santa Cruz</td>
<td>Biological Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Fullerton</td>
<td>B.A., University of California, Santa Cruz</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>California State University, Fullerton</td>
<td>M.S., California State University, Fullerton</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Loma Linda University</td>
<td>Ph.D., Loma Linda University</td>
</tr>
<tr>
<td>Name</td>
<td>Year</td>
<td>Field</td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------</td>
<td>--------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Ryasko, Charles</td>
<td>2002</td>
<td>B.S., California Polytechnic University</td>
<td>Pomona</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.S., Mt. San Antonio College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., California State University, Los Angeles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>F.A.A. Certificates: Flight Instructor; Airplanes &amp; Instruments; Commercial Pilot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubenstein, Susie</td>
<td>2005</td>
<td>A.S., Mt. San Antonio College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., University of California, Santa Cruz</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.F.A., Kansas City Art Institute</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.F.A., Cranbrook Academy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudd, Terry Shaylor</td>
<td>1988</td>
<td>A.S., East Los Angeles College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S., California State University, Los Angeles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ruh, Marc T.</td>
<td>1997</td>
<td>Physical Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.A., Mt. San Antonio College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., University of California, Santa Barbara</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., Azusa Pacific University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Runnebohn, Stephen</td>
<td>1987</td>
<td>Dean, Humanities &amp; Social Sciences Division</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., M.A., Ball State University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ph.D., University of Missouri</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russell, Paul</td>
<td>1988</td>
<td>Learning Assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., California Polytechnic University</td>
<td>Pomona</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.Ed., California Lutheran College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ryasko, Charles</td>
<td>2002</td>
<td>Electronics &amp; Computer Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.A., Mt. San Antonio College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., California Polytechnic University</td>
<td>Pomona</td>
<td></td>
</tr>
<tr>
<td>Sanchez, Andrew</td>
<td>2001</td>
<td>Mental Health Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.S., R.N., Mt. San Antonio College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanchez, Juan</td>
<td>2005</td>
<td>Physical Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., California State University, Los Angeles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.Ed., University of LaVerne</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schaina, Lance M.</td>
<td>1989</td>
<td>Mathematics, Computer Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., Harvey Mudd College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S., California Polytechnic University, Pomona</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schmidt, David</td>
<td>2002</td>
<td>Electronics &amp; Computer Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.A., Mt. San Antonio College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.V. Ed., M.A.Ed., California State University, Pomona</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schmidt, Sherry</td>
<td>1985</td>
<td>Biological Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., University of Montana</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schnurbusch, Karen</td>
<td>2002</td>
<td>Physics &amp; Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., University of California, Santa Barbara</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S., University of Illinois, Urbana-Champaign</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sciore, Donald</td>
<td>1999</td>
<td>Art, Animation &amp; Broadcasting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.F.A., California State University</td>
<td>Fullerton</td>
<td></td>
</tr>
<tr>
<td>Scott, Brian</td>
<td>2001</td>
<td>Agricultural Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.S., Mt. San Antonio College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., California Polytechnic University</td>
<td>Pomona</td>
<td></td>
</tr>
<tr>
<td>Shannah, Cynthia</td>
<td>1991</td>
<td>Biological Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.A., Fullerton College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., M.S., California Polytechnic University, Pomona</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharpe, Paul W.</td>
<td>1997</td>
<td>Public Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., College of Santa Fe</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S.W., California State University, San Bernardino</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Certified Substance Abuse Counselor, UCLA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shepherd, John C.</td>
<td>1981</td>
<td>Aircraft Maintenance &amp; Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.A., Chaffey College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community College Instructor Credential</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>C.C. Supervisory Credential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sholars, Joan</td>
<td>1991</td>
<td>Mathematics, Computer Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., M.A., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shull, Stephen</td>
<td>2006</td>
<td>Fire Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., Southern Illinois University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S., California State University, Long Beach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silva, Lawrence</td>
<td>2005</td>
<td>Learning Assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., California Polytechnic University, Pomona</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., Chapman University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith, Daniel E.</td>
<td>1998</td>
<td>Art, Animation &amp; Broadcasting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith, Harry</td>
<td>1987</td>
<td>Electronics &amp; Computer Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.A., Pasadena City College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., California State University, Los Angeles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smith, James B.</td>
<td>1998</td>
<td>Counseling</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., M.A., California State University</td>
<td>Fullerton</td>
<td></td>
</tr>
<tr>
<td>Smith, John K.</td>
<td>2001</td>
<td>Public Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., M.S.W., Indiana University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soares, Darrow</td>
<td>1992</td>
<td>Air Conditioning, Welding, &amp; Water Technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.A., Riverside City College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., University of California, Riverside</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., California State University, San Bernardino</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sorcabal, Charles</td>
<td>1991</td>
<td>Mathematics, Computer Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., California Polytechnic University, Pomona</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soto, Lina</td>
<td>2001</td>
<td>Counseling</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., University of California, San Diego</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., San Diego State University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sparks-Mackey, Maxine</td>
<td>1990</td>
<td>History, Art History, Geography, Political Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., University of Redlands</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.P.A., University of Southern California</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ph.D., Claremont Graduate School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spaulding, Ralph A.</td>
<td>1970</td>
<td>History, Art History, Geography, Political Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., University of Santa Clara</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., Claremont Graduate School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stepp-Bolling, Eric</td>
<td>1977</td>
<td>Learning Assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., University of California, Santa Barbara</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., State University of New York at Fredonia</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stern, Kerry</td>
<td>1990</td>
<td>Dean, Library &amp; Learning Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.A., Citrus Community College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.A., California State University, Fullerton</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S.L.S., University of Southern California</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stokes, Nona</td>
<td>1990</td>
<td>American Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., Howard University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S., Ph.D., Georgetown University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strand, Richard W.</td>
<td>2001</td>
<td>Theater</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., Eastern Michigan University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.F.A., University of Iowa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strope, Byron</td>
<td>1990</td>
<td>Aircraft Maintenance &amp; Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A.S., Chaffey College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., California Polytechnic University, Pomona</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>F.A.A. Certificates, Airframe and Powerplant, Inspection Authorization</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private Pilot, F.C.C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>F.A.A. Safety Counselor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>F.A.A. Designated Mechanic Examiner</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### The Faculty

**Stuard, Bob (1986)**  
Sign Language  
A.A., San Diego Mesa College  
B.A., University of California, San Diego  
M.B.A., California State University, Dominguez Hills  

**Sullivan, Michael P. (1991)**  
English, Literature & Journalism  
B.A., Hamilton College  
M.A., State University of New York  
Ph.D., University of Rhode Island  

**Summers, Melody (2006)**  
Mathematics, Computer Science  
B.S., M.S., California State Polytechnic University, Pomona  

**Sun, Christine (2001)**  
Mathematics, Computer Science  
B.S., National Taiwan University  
M.A., State University of New York  

**Swanegan, Michael (1999)**  
Physical Education  
A.A., Paris Junior College  
B.A., Langston University  
M.Ed., Azusa Pacific University  

**Tanaka, Sylvia (2013)**  
English, Literature & Journalism  
B.A., M.A., California State University, Long Beach  

**Stuart, David (1985)**  
Mathematics, Computer Science  
B.S., M.S., California State Polytechnic University, Pomona  

**Tejeda, Leila (2011)**  
Mathematics, Computer Science  
B.S., M.S., California State Polytechnic University, Pomona  

**Tejeda, Maria (2011)**  
Mathematics, Computer Science  
B.S., M.S., California State Polytechnic University, Pomona  

**Teske, Margaret (2002)**  
Coordinator, ESL & Intercultural Programs  
B.S., University of Northern Colorado  
M.S., Colorado State University  

**Thomas, Antoine (2006)**  
Counseling  
B.A., University of California, Riverside  
M.S., California State University, Long Beach  

**Thomas, James D. (1998)**  
English, Literature & Journalism  
B.A., Westmont College  
M.A., Ph.D., Claremont Graduate University  

**Todd, Douglas (1995)**  
Physical Education  
A.A., El Camino College  
B.A., California State University, Long Beach  
M.A., California State University, Dominguez Hills  

**Ton, Chan (2005)**  
Counseling  
B.A., University of California, San Diego  

**Tran, Frank (2002)**  
Mathematics, Computer Science  
B.S., University of California, Davis  
M.A., University of California, Santa Barbara  

**Tripp, Robin R. (1985)**  
English, Literature & Journalism  
B.A., M.A., California State University, Chico  

**Troxell, Cameron (2001)**  
Mathematics, Computer Science  
B.A., Gonzaga University  
M.S., University of La Verne  

**Trujillo, Tammy (1999)**  
Art, Animation & Broadcasting  
A.A., Long Beach City College  
B.A., California State University, Fullerton  

**Trull, Stephen Tyler (2001)**  
History, Art History, Geography, Political Science  
A.A., Mt. San Antonio College  
B.A., California State University, Fullerton  
M.A., University of California, Santa Barbara  

**Truttmann, Janet (2002)**  
Chemistry  
B.A., University of California, San Diego  
Ph.D., California Institute of Technology  

**Tunstall, Christine M. (1990)**  
Disabled Student Programs & Services  
B.A., M.A., University of Michigan  

**Uyeno, Gary (1999)**  
Registered Veterinary Technology  
B.S., University of California, Davis  
D.V.M., Iowa State University  

**Vail, Deidre Tucker (1991)**  
Biological Sciences  
B.S., California State Polytechnic University, Pomona  
M.S., University of California, Irvine  

**Vela, Thomas (1991)**  
Architecture & Engineering Design Technology  
B.A., California State University, Long Beach  
M.A., College of St. Thomas  

**Vice, Robert Glenn (1999)**  
Business Administration  
B.A., Florida State University  
M.A., Louisiana State University, New Orleans  

**Vidal, Soledad (2006)**  
History, Art History, Geography, Political Science  
B.A., M.S., University of California, Irvine  

**Vigano, Barbara (1989)**  
Foreign Languages  
B.A., M.A., California State University, Fullerton  

**Villarreal, Guillermo (1991)**  
Foreign Languages  
B.A., California State University, Long Beach  
M.A., Ph.D., University of California, Irvine  

Mathematics, Computer Science  
B.A., San Bernardino Valley College  
B.S., M.S., California State Polytechnic University, Pomona  

Mathematics, Computer Science  
B.S., University of California, Los Angeles  
M.S., California State University, Long Beach  

**Walker, Christopher N. (1980)**  
Disabled Student Programs & Services  
B.A., California Lutheran College  
M.A., California State University, Northridge  
Ph.D., University of Iowa  

Learning Assistance  
B.S., University of California, Riverside  
M.A., Ph.D., Claremont Graduate University  

**Walker, Rebecca (2006)**  
Earth Sciences, Astronomy  
B.A., Hamilton College  
M.S., University of Arizona
<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Degree(s)</th>
<th>Institution(s)</th>
</tr>
</thead>
</table>
| Ward, Elizabeth (1999)      |            | Physical Education                                                        | B.A., California State University, Long Beach  
                             |            |                                                                           | M.A., California State Polytechnic University, Pomona                                             |
| Watanabe, Kathleen (1996)   |            | Family & Consumer Sciences                                                 | B.S., California State University, Los Angeles                                                    |
| Watanabe, Larry (1992)      |            | Physical Education                                                         | B.S., California State University, Fullerton                                                       |
| Watanabe, Larry             |            |                                                                           | M.A., Azusa Pacific College                                                                        |
| West, David (2005)          |            | Aeronautics and Transportation                                             | M.S., Duke University                                                                             |
| Whalen, Margaret F. (1989)  |            | English, Literature & Journalism                                           | B.S., Jacksonville University                                                                     |
| Whalen, Margaret F.         |            |                                                                           | M.A., University of Maine at Orono                                                                |
| Wiesner, Mary Rose (2002)   |            | Respiratory Therapy                                                        | B.S., Northeastern University                                                                     |
| Wilcher, Lance (2005)       |            | Nursing                                                                   | B.S., M.S., University of Southern California                                                    |
| Wilkerson, Jill K. (2001)   |            | Disabled Student Programs & Services                                        | B.A., University of South Dakota                                                                  |
| Williams, Bruce (1988)      |            | English, Literature & Journalism                                           | B.A., University of California, Los Angeles                                                      |
| Williams, Deborah (1992)    |            | Mathematics, Computer Science                                              | B.S., California State Polytechnic University, Pomona                                               |
| Williams, Stephen A. (1978) |            | Medical Services                                                           | A.A., Glendale College                                                                             |
| Williams Tyler, Jody (2002) |            | Chemistry                                                                 | B.S., University of Evansville                                                                    |
| Wilson, Keith (2000)        |            | Art, Animation & Broadcasting                                              | M.S., Ph.D., University of California, Irvine                                                     |
| Wilson, Randall (1988)      |            | Counseling                                                                | B.A., B.S., California State University, Fullerton                                                |
| Wolde-Yohannes, Samuel (2001)|        | Sociology, Philosophy                                                     | B.A., M.A., Ph.D., Pontifical Gregorian University, Rome, Italy                                    |
| Wolf, Phillip (1995)        |            | Physics & Engineering                                                      | B.S., Harvey Mudd College                                                                         |
| Wolde-Yohannes, Samuel       |            |                                                                           | M.L.I.S., University of California, Los Angeles                                                   |
| Wilkie, Stephen C.           |            |                                                                           | M.A., Pittsburgh State University                                                                 |
| Wright, Carol Z. (2001)     |            | Biological Sciences                                                       | B.S., Pharmacy School Minden, Germany                                                               |
| Wydra, Susan (1992)         |            | Mental Health Technology                                                  | A.S., Cypress College                                                                             |
| Yamagata-Noji, Audrey (1996)|            |                                                                           | B.S., Penn State University                                                                       |
| Y                           |            |                                                                           | M.S., California State University, Fullerton                                                      |
| York, Jean (1999)           |            | Family & Consumer Sciences                                                 | B.A., California State Polytechnic University, Pomona                                               |
| Zuniga, Irma (1979)         |            | Counseling                                                                | A.A., San Bernardino Valley Community College                                                     |
| Z                           |            |                                                                           | B.A., University of California, Riverside                                                         |
| Z                           |            |                                                                           | M.A., California State University, San Bernardino                                                 |
Index

A

ability to benefit test ................................................. 9
academic
distinction .......................................................... 14
honesty ................................................................. 218
honors ................................................................. 14
policies and requirements ........................................ 11
probation .............................................................. 15
renewal ................................................................. 16
standards .............................................................. 15
acceptance of domestic coursework from accredited colleges
and universities in the united states ............................ 7
access to educational records .................................... 221
accounting (BUSBA) ................................................ 130
certificate .................................................................. 66
major ...................................................................... 36
accounting – bookkeeping
certificate .................................................................. 66
accounting – computerized
certificate .................................................................. 66
accounting – financial planning
certificate .................................................................. 66
accounting – managerial
certificate .................................................................. 66
accounting – payroll
certificate .................................................................. 66
accreditation .............................................................. 1
adaptive physical education (PE-L) .......................... 187
address ..................................................................... 1
administration .......................................................... 2
administration – administrative services – staff ....... 2
administration – human resources .............................. 2
administration – information and educational technology .... 2
administration – institutional advancement – staff .... 2
administration – instruction – staff ............................. 2
administration – instructional divisions ........................ 3
administration – student services – staff .................... 3
administration of justice:
   law enforcement (ADJU) ........................................ 109
administrative assistant
certificates .................................................................. 67
major ...................................................................... 36
admission and registration ........................................... 6
noncredit ................................................................. 215
admissions and records ............................................ 18
adult education matriculation process –
   see community and noncredit education ........................ 215
advanced placement examination ................................ 13
advertising design/graphics (ARTC) ......................... 123
major ...................................................................... 36
advising center .......................................................... 18
advisory – definition ................................................. 9, 107
aeronautics (AERO) .................................................. 109
agri-business (AGAB) .............................................. 110
agri-business
   major ...................................................................... 36
agri-technology
   major ...................................................................... 36
agriculture
   forestry, conservation (AGFR) ............................... 111
   general subjects (AGAG) ....................................... 111
   livestock production (AGLI) ................................. 112
   ornamental horticulture (AGOR) ......................... 115
   pet science (AGPE) .............................................. 113
   tractor and landscape equipment operations (AGOR) .... 36
   air conditioning and refrigeration (AIRC) .............. 115
   certificate .................................................................. 67
   major ...................................................................... 35
   air traffic control (AIRT) ......................................... 116
   aircraft maintenance technology (AIRM) ............ 117
   aircraft powerplant maintenance technology day and evening
     certificate ............................................................... 67
   airframe maintenance technology day and evening
     certificate ............................................................... 68
   airframe and aircraft powerplant
     maintenance technology
     major ...................................................................... 37
   alcohol and drugs ................................................. 118
   alcohol/drug counseling (AD) ................................. 67
   certificate .............................................................. 68
   major ...................................................................... 38
   Alpha Gamma Sigma .............................................. 15
   American language (AMLA) ................................. 119
   anatomy and physiology (ANAT) ......................... 120
   animal health technology (AGHE) ....................... 110
   animal science (AGAN) .......................................... 111
   animals on campus ................................................. 218
   animal husbandry ................................................... 112
   animal husbandry technology 
      day and evening ............................................... 114
   animal husbandry technology
      major ...................................................................... 38
   animal husbandry technology
      noncredit ............................................................ 220
   animal husbandry technology
      professional certificate ....................................... 69
   animal husbandry technology
      associate degree ............................................... 123
   animal husbandry technology
      certificate ............................................................ 68
   animal husbandry technology
      major ...................................................................... 38
   animal husbandry technology
      associate degree ............................................... 123
   animal husbandry technology
      certificate ............................................................ 68
   animal husbandry technology
      major ...................................................................... 38
   art: advertising design/graphics (ARTC) .............. 123
   art: aesthetics for technology
      certificates ........................................................... 71
   art: art history (AHIS) ........................................... 122
   art: basic studio arts (ARTB) ................................... 122
   art: special studio arts (ARTZ) ............................... 126
   art: three-dimensional studio arts (ARTS) ............. 126
   art: two-dimensional studio arts (ARTD) ............... 127
   art division ............................................................. 3
   articulation with high schools, ROP’s, and adult schools...... 7
   assessment and placement ..................................... 8
   noncredit .............................................................. 215
   assessment center .................................................. 18
   associate degree graduation requirements .............. 31
   associate in arts degree (A.A.) graduation requirements .... 31
   associate in science degree (A.S.) alphabetic listing .... 31
   alphabetic listing ...................................................... 34
   listing by instructional division ................................ 35
   programs .............................................................. 35
   astronomy (ASTR) ............................................... 128
   attendance and enrollment ................................... 11
   athletic facilities .................................................... 27
   athletic trainer aide I
      certificate ............................................................ 71
   athletics (PE-X) ..................................................... 189
   auditing courses ..................................................... 11
   auxiliary services .................................................... 27
   aviation science
      major ...................................................................... 39

2006-07 Mt. San Antonio College Catalog 235
Index

B
basic skills and special programs ............................................. 215
biology (BIOL) ................................................................. 129
board of trustees .................................................................. 2
members .............................................................................. 2
bookstore .............................................................................. 27
botany (BTVY) ....................................................................... 130
box office ............................................................................. 28
bridge program ....................................................................... 18
burden of proof ...................................................................... 6
bursar’s office ......................................................................... 18
business
accounting (BUSA) ................................................................. 130
economics (BUSC) ................................................................. 131
law (BUSL) ........................................................................... 131
management (BUSM) .............................................................. 133
office technology (BUSO) ......................................................... 134
real estate (BUSR) ................................................................. 134
sales, merchandising and marketing (BUSM) ......................... 135
business and economic development division
deans and directors ............................................................... 2
business: human resource management
certificates ......................................................................... 71
major .................................................................................. 48
business: international
certificates ......................................................................... 72
major .................................................................................. 48
business: management
certificates ......................................................................... 73
major .................................................................................. 48
business: retail management
certificates ......................................................................... 73
major .................................................................................. 48
business: small business management
certificates ......................................................................... 74
major .................................................................................. 60
business: workplace competencies
certificate ........................................................................... 74
C
CAN – California Articulation Number ..................................... 107
calendar 2006 - 2007 ............................................................... vi-viii
California State University (CSU) ........................................... 98
general education requirements ............................................ 99
transfer requirements ............................................................ 98
campus cafe ............................................................................ 27
campus catering ..................................................................... 27
campus disturbances ............................................................. 218
campus facilities ..................................................................... 27
campus hours ......................................................................... 218
campus services for students ................................................ 18
cancelled classes ................................................................... 8
career counseling ................................................................... 18
career placement services ...................................................... 18
catalog changes ...................................................................... 11
catalog rights ......................................................................... 222
certificates
alphabet listing ..................................................................... 63
listing by instructional division ............................................... 64
programs .............................................................................. 66
requirements ......................................................................... 63
challenge of educational records ............................................ 16
challenging prerequisites and corequisites ................................ 9
cheating and plagiarism ......................................................... 218
chemical laboratory technician
major .................................................................................... 39
chemical technology (CHMT) ................................................. 136
chemistry (CHM) ................................................................... 136
child development (CHIL) ....................................................... 137
major .................................................................................... 39
child development center ....................................................... 21
children on campus ............................................................... 218
children’s program
administration – certificate .................................................... 74
general – certificate .............................................................. 75
small business management – certificate ............................... 75
teaching – certificate ............................................................ 75
Chinese (CHIN) ..................................................................... 139
classification of students ........................................................ 11
classroom visitors ................................................................. 218
clearing probation .................................................................. 15
clubs and organizations ........................................................ 21
coaching
certificate ............................................................................ 76
college
directory .............................................................................. ix
foundation ............................................................................ 1
history .................................................................................... 1
mission, vision and values .................................................... 1
organization .......................................................................... 2
policies and notices ............................................................... 218
starter program ..................................................................... 6
commercial flight
major .................................................................................... 40
communication
radio-television (R-TV) .......................................................... 201
speech (SPCH) ...................................................................... 208
community education
division ............................................................................... 215
basic skills ............................................................................ 215
citizenship – see ESL ............................................................ 215
community services classes .................................................. 215
ESL (English as a second language) ..................................... 215
exercise science and wellness center ..................................... 216
health careers resource center ............................................. 216
language learning center ..................................................... 216
older adults programs .......................................................... 216
parenting – see basic skills ................................................... 215
training source ...................................................................... 215
computer aided graphics, visual arts and design .................... 24
computer applications (COMP) ............................................. 140
computer graphics
(ARTC) .................................................................................. 123
(GRAP) .................................................................................. 140
computer graphics design/photography
certificate ........................................................................... 76
major .................................................................................... 40
computer information systems (CIS) ..................................... 78
computer network administration and
security management, major ............................................... 40
management – microcomputers .......................................... 78
network security .................................................................... 78
professional certificate in C# programming ............................ 78
professional certificate in C++ programming ......................... 78
professional certificate in database
professional certificate in java .............................................. 78
professional certificate in linux .............................................. 78
professional certificate in networking ..................................... 78
professional certificate in oracle ............................................. 78
professional certificate in SQL .............................................. 79
professional certificate in visual basic programming ............. 79
professional certificate in web programming ......................... 79
professional certificate in windows
operating system administration ........................................... 79
telecommunications ............................................................. 79
computer and networking technology (CNET)
certificates ............................................................................ 139
major .................................................................................... 40
### Index

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>full-time student</td>
<td>11</td>
</tr>
<tr>
<td>French (FRCH)</td>
<td>163</td>
</tr>
<tr>
<td>foster care</td>
<td>85</td>
</tr>
<tr>
<td>food services</td>
<td>27</td>
</tr>
<tr>
<td>forestry conservation (AGFR)</td>
<td>111</td>
</tr>
<tr>
<td>general education</td>
<td>47</td>
</tr>
<tr>
<td>general business</td>
<td>45</td>
</tr>
<tr>
<td>administrative communications, major</td>
<td>45</td>
</tr>
<tr>
<td>administrative law, major</td>
<td>45</td>
</tr>
<tr>
<td>certificate</td>
<td>84</td>
</tr>
<tr>
<td>fire technology (FIRE)</td>
<td>161</td>
</tr>
<tr>
<td>administration, major</td>
<td>45</td>
</tr>
<tr>
<td>certificate</td>
<td>84</td>
</tr>
<tr>
<td>fire training, major</td>
<td>46</td>
</tr>
<tr>
<td>private fire service, major</td>
<td>46</td>
</tr>
<tr>
<td>fitness (PE-F)</td>
<td>191</td>
</tr>
<tr>
<td>fitness specialist/personal trainer</td>
<td>84</td>
</tr>
<tr>
<td>floral design</td>
<td>85</td>
</tr>
<tr>
<td>certificate</td>
<td>85</td>
</tr>
<tr>
<td>major</td>
<td>46</td>
</tr>
<tr>
<td>graduation</td>
<td>11</td>
</tr>
<tr>
<td>petition (application)</td>
<td>30</td>
</tr>
<tr>
<td>requirements</td>
<td>30</td>
</tr>
<tr>
<td>grievance process</td>
<td>220</td>
</tr>
<tr>
<td>health services</td>
<td>20</td>
</tr>
<tr>
<td>health services training (HT)</td>
<td>168</td>
</tr>
<tr>
<td>history (HIST)</td>
<td>166</td>
</tr>
<tr>
<td>history, Mt. San Antonio College</td>
<td>1</td>
</tr>
<tr>
<td>honors</td>
<td>14</td>
</tr>
<tr>
<td>honors program</td>
<td>14</td>
</tr>
<tr>
<td>horse ranch management</td>
<td>85</td>
</tr>
<tr>
<td>certificate</td>
<td>85</td>
</tr>
<tr>
<td>major</td>
<td>47</td>
</tr>
<tr>
<td>hospitality &amp; restaurant management (HRM)</td>
<td>168</td>
</tr>
<tr>
<td>major</td>
<td>47</td>
</tr>
<tr>
<td>hospitality: catering</td>
<td>85</td>
</tr>
<tr>
<td>hospitality: food services</td>
<td>85</td>
</tr>
<tr>
<td>hospitality: hospitality management – level I</td>
<td>85</td>
</tr>
<tr>
<td>hospitality: hospitality management – level II</td>
<td>86</td>
</tr>
<tr>
<td>hospitality: restaurant management – level I</td>
<td>86</td>
</tr>
<tr>
<td>hospitality: restaurant management – level II</td>
<td>86</td>
</tr>
<tr>
<td>human resource management</td>
<td>71-72</td>
</tr>
<tr>
<td>certificates</td>
<td>48</td>
</tr>
<tr>
<td>human resources – staff</td>
<td>2</td>
</tr>
<tr>
<td>humanities (HUMA)</td>
<td>170</td>
</tr>
<tr>
<td>humanities and social sciences division</td>
<td>3</td>
</tr>
<tr>
<td>IGETC</td>
<td>105</td>
</tr>
<tr>
<td>incomplete grades</td>
<td>11</td>
</tr>
<tr>
<td>independent colleges and universities</td>
<td>105</td>
</tr>
<tr>
<td>industrial electronics</td>
<td>86</td>
</tr>
<tr>
<td>certificate</td>
<td>86</td>
</tr>
<tr>
<td>infant/toddler development</td>
<td>86</td>
</tr>
<tr>
<td>certificate</td>
<td>86</td>
</tr>
<tr>
<td>information and educational technology – staff</td>
<td>2</td>
</tr>
<tr>
<td>information and operating systems security</td>
<td>2</td>
</tr>
<tr>
<td>certificate</td>
<td>86</td>
</tr>
<tr>
<td>inspection and estimating, building (INSP)</td>
<td>170</td>
</tr>
<tr>
<td>institutional advancement – staff</td>
<td>2</td>
</tr>
<tr>
<td>instruction and learning resources</td>
<td>23</td>
</tr>
<tr>
<td>instruction – staff</td>
<td>2</td>
</tr>
<tr>
<td>instructional divisions</td>
<td>2</td>
</tr>
<tr>
<td>arts division</td>
<td>3</td>
</tr>
<tr>
<td>business and economic development division</td>
<td>3</td>
</tr>
<tr>
<td>community education division</td>
<td>3</td>
</tr>
<tr>
<td>humanities and social sciences division</td>
<td>3</td>
</tr>
<tr>
<td>library and learning resources division</td>
<td>3</td>
</tr>
<tr>
<td>natural sciences division</td>
<td>4</td>
</tr>
<tr>
<td>physical education division</td>
<td>4</td>
</tr>
<tr>
<td>technology and health division</td>
<td>4</td>
</tr>
<tr>
<td>interior design (ID)</td>
<td>170</td>
</tr>
<tr>
<td>certificate</td>
<td>86</td>
</tr>
<tr>
<td>major</td>
<td>48</td>
</tr>
<tr>
<td>interior design, kitchen and bath design</td>
<td>87</td>
</tr>
<tr>
<td>certificate</td>
<td>48</td>
</tr>
<tr>
<td>major</td>
<td>48</td>
</tr>
<tr>
<td>international business certificates</td>
<td>72</td>
</tr>
<tr>
<td>major</td>
<td>48</td>
</tr>
<tr>
<td>international student programs</td>
<td>20</td>
</tr>
<tr>
<td>international students</td>
<td>7</td>
</tr>
<tr>
<td>intersegmental general education</td>
<td>87</td>
</tr>
<tr>
<td>transfer curriculum (IGETC)</td>
<td>105</td>
</tr>
<tr>
<td>introduction to computer information technology certificate</td>
<td>87</td>
</tr>
<tr>
<td>Italian (ITAL)</td>
<td>171</td>
</tr>
<tr>
<td>J</td>
<td></td>
</tr>
<tr>
<td>Japanese (JAPN)</td>
<td>172</td>
</tr>
<tr>
<td>journalism (JOUR)</td>
<td>172</td>
</tr>
<tr>
<td>K</td>
<td></td>
</tr>
<tr>
<td>KSAK</td>
<td>28</td>
</tr>
<tr>
<td>kitchen and bath design</td>
<td>87</td>
</tr>
<tr>
<td>certificate</td>
<td>87</td>
</tr>
<tr>
<td>L</td>
<td></td>
</tr>
<tr>
<td>LVN</td>
<td>89</td>
</tr>
<tr>
<td>certificate</td>
<td>89</td>
</tr>
<tr>
<td>landscape and park maintenance</td>
<td>88</td>
</tr>
<tr>
<td>certificate</td>
<td>88</td>
</tr>
<tr>
<td>landscape design and construction</td>
<td>88</td>
</tr>
<tr>
<td>certificate</td>
<td>88</td>
</tr>
<tr>
<td>landscape equipment technology</td>
<td>88</td>
</tr>
<tr>
<td>certificate</td>
<td>88</td>
</tr>
<tr>
<td>landscape irrigation</td>
<td>88</td>
</tr>
<tr>
<td>certificate</td>
<td>88</td>
</tr>
<tr>
<td>language learning center</td>
<td>215</td>
</tr>
</tbody>
</table>
Index

U
UC transfer credit limitation ........................................ 107
UC transfer requirements ........................................... 98
unit of credit ......................................................... 11
University of California ............................................. 98

V
values ................................................................. 1
vending machines .................................................... 27
veterans' affairs ..................................................... 20
vision ................................................................. 1

W
water technology (WATR) .......................................... 211
certificate .......................................................... 95
web page design
  certificate .......................................................... 95
web site address ................................................... 1
welding (WELD) .................................................... 212
certificate .......................................................... 95
major ................................................................. 60
wildlife sanctuary ................................................. 28
withdrawing from the college ..................................... 11
work experience education ....................................... 23
Workplace competencies
  certificate .......................................................... 74
Due to construction, this map changes frequently. Please check the Mt. SAC website for the latest version of the campus map.
MT. SAC Turns 60 in 06!

Founders Day: Saturday, September 16

From its humble beginnings with only 23 faculty members teaching the first 635 students in a collection of former military barracks, Mt. SAC has grown to become one of the nation's largest and finest community colleges with nearly 40,000 students and 400 full-time instructors. The 420-acre campus is now an eclectic mix of traditional and contemporary architecture and rolling green hills.

As we advance toward the next 60 years, we remain committed to providing the finest undergraduate education and career/professional training to enhance the quality of life for our students and our community.

Pete Reynolds
Mt. SAC's 1st Class*

Alex Wu
Mt. SAC's 1 Millionth Student

*Honored among 2006 Distinguished Alumni of the Year.