OPEN COURSES

It is the policy of the Cerritos Community College District that, unless specifically exempted by statute, every course, course section or class, the attendance of which is to be reported for state aid, wherever offered and maintained by the district, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to Title 5 of the California Administrative Code, commencing with Section 51006.

All announcements herein are subject to revision. Changes may be made subsequent to the date of publication.
2006-2007 ACADEMIC CALENDAR*

FALL SEMESTER 2006
Instruction Begins .................................................. August 14, 2006
Final Examinations .................................................. December 9-15, 2006
Fall Semester Ends .................................................. December 15, 2006

SPRING SEMESTER 2007
Instruction Begins .................................................. January 8, 2007
Final Examinations .................................................. May 12-18, 2007
Spring Semester Ends ................................................ May 18, 2007
Commencement ....................................................... May 12, 2007

HOLIDAYS (THE COLLEGE WILL BE CLOSED)
Independence Day .................................................... July 4, 2006
Labor Day ............................................................. September 4, 2006
Veterans Day Observance ........................................ November 10, 2006
Thanksgiving Holiday ................................................ November 23-26, 2006
Dr. Martin Luther King, Jr’s Birthday Observance ........ January 15, 2007
Abraham Lincoln’s Birthday Observance ................. February 16, 2007
George Washington’s Birthday Observance ............. February 19, 2007
Good Friday .............................................................. April 6, 2007
Memorial Day ............................................................ May 28, 2007

RECESS
Semester Break ....................................................... December 18, 2006-January 5, 2007
Spring Recess ............................................................ April 2-8, 2007

*This calendar is subject to change. The Schedule of Classes contains specific dates, times, procedures, and appointment information.

ANNUAL SECURITY REPORT
Cerritos College publishes an Annual Security Report in accordance with the Cleary Act. This report includes statistics for the previous three years concerning reported crimes that occurred on-campus; in certain off-campus buildings or property owned or controlled by Cerritos College; and on public property within, or immediately adjacent to and accessible from, the campus. This report also includes institutional policies concerning campus security, such as policies concerning sexual assault, and other matters. You can obtain a copy of this report by contacting the Campus Police Department in person or at (562) 860-2451, extension 3202. This report is also available on the Web at www.cerritos.edu/police.
### WHOM TO CONTACT

**Telephone:** (562) 860-2451

<table>
<thead>
<tr>
<th>GENERAL OFFICES</th>
<th>EXT</th>
<th>AREAS OF INTEREST</th>
<th>EXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>President/Superintendent</td>
<td>2204</td>
<td>Disabled Student Programs, Director</td>
<td>2334</td>
</tr>
<tr>
<td>Academic Affairs</td>
<td>2227</td>
<td>Central Intake (Information)</td>
<td>2333</td>
</tr>
<tr>
<td>Accounts Payable/Receiveable</td>
<td>2261</td>
<td>Resource Center</td>
<td>2336</td>
</tr>
<tr>
<td>Admissions and Records</td>
<td>2211</td>
<td>Instructional Support Center</td>
<td>2346</td>
</tr>
<tr>
<td>Bookstore</td>
<td>2462</td>
<td>Speech, Language and Hearing</td>
<td>2351</td>
</tr>
<tr>
<td>Business Services (Information)</td>
<td>2241</td>
<td>Hi-Tech Micro-Computer Center</td>
<td>2349</td>
</tr>
<tr>
<td>Community, Industry, Technology Education</td>
<td>2482</td>
<td>Distance Education</td>
<td>2837</td>
</tr>
<tr>
<td>Adult Ed/Diversity Programs</td>
<td>2491</td>
<td>Drafting (CAD Lab)</td>
<td>2906</td>
</tr>
<tr>
<td>Applied Technology Education Center (ATEC)</td>
<td>2511</td>
<td>Drops and Adds</td>
<td>2211</td>
</tr>
<tr>
<td>Citizenship Education</td>
<td>5098</td>
<td>Electronics</td>
<td>2916</td>
</tr>
<tr>
<td>Community Education</td>
<td>2521</td>
<td>EMERGENCY</td>
<td>3000</td>
</tr>
<tr>
<td>Economic Development</td>
<td>2511</td>
<td>EOPS Office</td>
<td>2398</td>
</tr>
<tr>
<td>Emeritus Education</td>
<td>2493</td>
<td>Fees (Students)</td>
<td>2101</td>
</tr>
<tr>
<td>Community Relations</td>
<td>2285</td>
<td>Financial Aid</td>
<td>2397</td>
</tr>
<tr>
<td>Computer Services</td>
<td>2166</td>
<td>Foster &amp; Kinship Care Education</td>
<td>2578</td>
</tr>
<tr>
<td>Counseling and Guidance</td>
<td>2231</td>
<td>Foundation</td>
<td>2526</td>
</tr>
<tr>
<td>Development</td>
<td>2191</td>
<td>Independent Study Center</td>
<td>2442</td>
</tr>
<tr>
<td>Facilities</td>
<td>2300</td>
<td>Innovation Center</td>
<td>2797</td>
</tr>
<tr>
<td>Fiscal Services</td>
<td>2261</td>
<td>International Students</td>
<td>2232</td>
</tr>
<tr>
<td>Human Resources</td>
<td>2284</td>
<td>International Student Counselor</td>
<td>2233</td>
</tr>
<tr>
<td>Information Technology and Development</td>
<td>2215</td>
<td>International Student Office</td>
<td>2133/2156</td>
</tr>
<tr>
<td>Instructional Media Services</td>
<td>2438</td>
<td>Coordinator</td>
<td>2151</td>
</tr>
<tr>
<td>Library</td>
<td>2430</td>
<td>Job Information Hotline</td>
<td>(562) 467-5042</td>
</tr>
<tr>
<td>Multi-Media Production</td>
<td>2439</td>
<td>Job Placement (Students)</td>
<td>2366</td>
</tr>
<tr>
<td>Payroll</td>
<td>2272/2273/2274</td>
<td>Job Training (JTPA)</td>
<td>2400</td>
</tr>
<tr>
<td>Publications</td>
<td>2289</td>
<td>Journalism</td>
<td>2617</td>
</tr>
<tr>
<td>Public Relations</td>
<td>2285</td>
<td>Language Center/Language Lab</td>
<td>2854</td>
</tr>
<tr>
<td>Purchasing</td>
<td>2243</td>
<td>Lost and Found</td>
<td>2325</td>
</tr>
<tr>
<td>Research</td>
<td>2193</td>
<td>Machine Tool Technology (MTT)</td>
<td>2925</td>
</tr>
<tr>
<td>Student Services</td>
<td>2236</td>
<td>Math Learning Center</td>
<td>2659</td>
</tr>
<tr>
<td><strong>DIVISIONS</strong></td>
<td></td>
<td>Music Department</td>
<td>2629</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parking/Ride Share</td>
<td>2326</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Photography Lab</td>
<td>2620</td>
</tr>
<tr>
<td>Business Education</td>
<td>2715</td>
<td>Physical Education Department</td>
<td>2859</td>
</tr>
<tr>
<td>Counseling</td>
<td>2231</td>
<td>Plastics and Composites (PMT)</td>
<td>2927</td>
</tr>
<tr>
<td>Fine Arts/Communications</td>
<td>2600</td>
<td>Police Department</td>
<td>2325</td>
</tr>
<tr>
<td>Health Occupations</td>
<td>2550</td>
<td>Radio Station, WPMD 1700AM</td>
<td>2626</td>
</tr>
<tr>
<td>HPER/Athletics</td>
<td>2859</td>
<td>Re-entry Resource Center</td>
<td>2362</td>
</tr>
<tr>
<td>Humanities/Social Sciences</td>
<td>2752</td>
<td>Refunds (Students)</td>
<td>2259/2271</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>2858</td>
<td>Reading Center</td>
<td>2856</td>
</tr>
<tr>
<td>Library &amp; Learning Resource Center</td>
<td>2430</td>
<td>Scholars Honors Program</td>
<td>2771/2728</td>
</tr>
<tr>
<td>Science/Engineering/Mathematics</td>
<td>2660</td>
<td>Scholarships</td>
<td>2130</td>
</tr>
<tr>
<td>Technology</td>
<td>2900</td>
<td>Speech Department</td>
<td>2844</td>
</tr>
<tr>
<td>Technology Training and Distance Education</td>
<td>2797</td>
<td>Sports Information</td>
<td>2896</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staff Development</td>
<td>2796</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Activities Office</td>
<td>2473</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clubs and Organizations</td>
<td>2471</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Judicial Affairs</td>
<td>2471</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Activities Center</td>
<td>2479</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Body President</td>
<td>2477</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Body Vice President</td>
<td>2478</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Government</td>
<td>2475</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student I.D. Center</td>
<td>2480</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student Health and Wellness Center</td>
<td>2321</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Talon Marks (Student Newspaper)</td>
<td>2617</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teleconference Center</td>
<td>2976</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Testing Assessment</td>
<td>2364/2399</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Theatre Arts Department</td>
<td>2638</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transfer Center</td>
<td>2154</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tutoring/Learning Assistance Program</td>
<td>2404</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Veterans Affairs</td>
<td>2104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weight Training Room</td>
<td>2885</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Welding</td>
<td>2924</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Woodworking Manufacturing</td>
<td>2926</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Writing Center</td>
<td>2855</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BOARD OF TRUSTEES
President .............................................. Mr. John Moore
Vice President ....................................... Mr. Tom Jackson
Secretary ............................................. Dr. Ted Edmiston
Member ............................................. Dr. Bob Arthur
Member ............................................. Ms. Theresa Lopez
Member ............................................. Ms. Patricia Robbins-Anema
Member ............................................. Mr. Nick Kremer
Member ............................................. Dr. Bob Epple
Member ............................................. Mrs. Carmen Avalos
Student Member ................................... Mr. Joe Cobarrubio

ADMINISTRATION
President/Superintendent ........................ Dr. Noelia Vela
Vice President of Academic Affairs/
Assistant Superintendent ...................... Mr. William Farmer, Jr.
Vice President of Business Services/
Assistant Superintendent ...................... Ms. Jo Ann Higdon
Vice President of Student Services/
Assistant Superintendent ...................... Dr. Stephen B. Johnson
Dean of Academic Affairs ..................... Dr. Adolph Johnson, Jr.
Dean of the Library and Learning
Resource Center ................................ Mr. John J. McGinnis
Executive Dean of Community, Industry and
Technology Education ....................... Mr. Nick Kremer
Executive Dean of Information Technology and
Development ........................................
Executive Director of Foundation ............ Mr. Steven Richardson
Administrative Dean of Innovation & Academic Support ........................ Mr. M. L. Bettino
Instructional Dean of Business Education .... Dr. Randy W. Peebles
Instructional Dean/Health Occupations ....... Ms. Jenine Nolan
Instructional Dean/Humanities and
Social Sciences ................................ Ms. Francine DeFrance
Instructional Dean/Fine Arts/Communications . Dr. Connie Mayfield
Interim Instructional Dean/Liberal Arts ........ Ms. Linda Rose
Instructional Dean/HPE/Athletics .............. Dr. Daniel Smith
Instructional Dean/Science, Engineering and
Mathematics ................................ Mr. Norman Fujimoto
Instructional Dean/Technology ............... Dr. Randy W. Peebles
Director of Foster/ Kinship Education Programs .......... Ms. Patricia Robbins-Anema
Director of Research and Planning ............ Ms. Caroline Sheldon
Title V Project Director ......................... Ms. Graciela Vasquez

COMMUNITY EDUCATION
Director of Community Education ............ Ms. Laura Franklin
Director of Adult Education/Diversity Programs ... Ms. Maggie Cordero
Director of Economic Development ........... Mr. Jose Anaya

FACILITIES SERVICES
Facilities Manager ................................. Mr. Thomas Richey
Director of Physical Plant ...................... Mr. Robert Riffle
Operations Manager .............................. Arcadio Avila

FISCAL SERVICES
Director of Fiscal Services ....................... Mrs. Lola Rizkallah
Director of Purchasing ............................ Ms. Jenney Ho
Accounting Manager ............................. Mr. Shawn Jones
Budget Manager ................................. Ms. Ramona Payne
Interim Payroll Manager ...................... Ms. Deanna Hart

HUMAN RESOURCES
Acting Director of Human Resources ........ Mr. Dan O’Rourke
Assistant Director of Human Resources ...... Ms. Adriana Flores-Church
Manager of Employment Services/ Faculty & Staff Diversity Officer ... Ms. Cynthia Convey

INFORMATION TECHNOLOGY
Director of Computer Services ................. Ms. Lee Krichmar
Manager Information Technology ............ Mr. Patrick O’Donnell

PUBLIC AFFAIRS
Director of Marketing/Public Relations ........ Mr. Taylor Bowman

STUDENT SERVICES
Dean of Admissions, Records and Services ... Ms. Stephanie Murguia
Dean of Counseling Services ................... Ms. Theresa Lopez
Chief of Campus Police ........................... Dr. Randy W. Peebles
Dean of Disabled Student Programs and Services .......................... Dr. Noelia Vela
Dean of Student Support Services .............. Dr. Phil Rodriguez
Coordinator of Student Health Services .......... Mr. Charles Gale
Coordinator of International Student Services .......... Ms. Danita Kurtz
Coordinator of Judicial Affairs ................. Mr. Pat Callahan
Coordinator of Student Activities ............... Mr. Dean Ackland
Director of Student Activities .................. Ms. Holly Bogdanovich
Coordinator of CalWORKs Services .......... Ms. Renee Chomiak

FACULTY SENATE
Faculty Senate President ........................ Mr. Bryan Reece

CERRITOS COLLEGE FACULTY FEDERATION – AFT
CCFF-AFT President ............................. Mr. David Fabish

CALIFORNIA SCHOOL EMPLOYEES ASSOCIATION
CSEA President ................................ Ms. Debbie Thomas
Cerritos College was established on June 10, 1955, when citizens of the Bellflower, Norwalk, Artesia, Carmenita, and Bloomfield elementary districts voted four-to-one in favor of forming a junior college district. On September 27, 1955, a ballot measure calling for a six-million-dollar bond issue to build the junior college passed, again by a four-to-one margin. Title to the proposed college site was acquired on December 5, 1956, and the college board turned its attention to securing favorable zoning so that construction could begin.

The credit for the birth of Cerritos College lies chiefly with Dr. Ralph Burnight, first president of the institution. Superintendent of the Excelsior Union High School District for 27 years before the college was born, Burnight had seen the need for the extension of educational opportunities offered at his high school and fought the state board of education for the establishment of a college in 1953, when the state board indicated it was doubtful that the district could attract a minimum enrollment of 400 students.

Dr. Burnight, however, was convinced that the area would continue to grow, and three years later the board of—Leslie Nottingham, Walter Van Alstine, Dale Donnell, Al Sommer and Arthur Kulzer—authorized the college to offer instruction. On September 11, 1956, in classrooms rented from the Excelsior High School District, 197 students enrolled in classes and made the college a reality. That first semester, ten certified teachers offered 15 subjects, with Dr. Burnight at the helm. Beginning with the 1957-58 school year, the college operated out of Artesia High School, awaiting the completion of the new campus.

By the end of 1959, eight buildings (Field House, 3-25-58; Business Education, Lecture Hall, Science, Shower and Locker, 10-6-59; Liberal Arts, Technology, Electronics, 9-15-59) had been completed on campus, and funds were made available to provide the remaining facilities to accommodate a student body of 3,500 students.

By 1961 the campus was beginning to look like a college with the completion of four more buildings (Library and Gymnasium, 7-1-61; Metal Trades Shop Building, 7-17-61; Student Center, 3-8-60) and an enrollment of 4,000 students. The campus included 95 acres in 1964, and its 15 permanent buildings brought the value of the college to 16 million dollars; it now served a district with an assessed valuation of 271 million dollars.

Effective July 1, 1965, the district included the ABC Unified School District, the Bellflower Unified School District, the Downey Unified School District and the Norwalk-La Mirada Unified School District. District population was 400,000 and the assessed valuation had jumped to more than 500 million dollars. This would be the year that, beyond the bravest expectations of everyone connected with Cerritos College, enrollment would exceed 10,000 students.

The College acquired the “South 40” acres by 1966, enlarging the campus to 135 acres. The purchase proved to be an excellent investment by the board; land values in the college’s district have since skyrocketed. The property today supports the Health Sciences Building, the largest parking lot on campus, the Auto Technology Building and the Community Education Center. The campus grew to 18 buildings by the 1968-69 school year, with a student enrollment of more than 11,000. The district, too, was growing and now included more than half a million people and an assessed valuation of 543 million dollars. The 18 buildings were complemented by a weight-lifting facility in 1971 and a student activities and bookstore complex in 1974.

With the campus thus complete for the time being, the administration and board of trustees turned to building the excellence of the academic programs, which had a strong foundation. Innovation in satellite courses, televised instruction, open entry and exit classes, and the move into audio-visual instruction marked the coming decade.

In 1972, the student population reached 17,000. The next year,
18,000 students attended classes, and the assessed valuation of the district had grown to more than 800 million dollars. The early 1970s were marked by spiraling inflation and tighter money; yet the College financed a new, modern bookstore (3-19-74), the Health Sciences Building (2-1-78) and the Auto Technology Building (9-1-78) to cope with the growing demands of students.

The bicentennial year in 1976 was a special time for Cerritos, as well as for millions of other Americans. Twenty years earlier, the 135-acre campus had been in its infancy, and educational visionaries had predicted that by 1975 more than 15,000 students would be attending classes in the many buildings depicted only on the architect’s drafting boards. That modest forecast failed to foresee an even greater need in the community by 1975, when nearly 23,000 students enrolled in courses. In 1970-71, the predicted 15,000 had already been exceeded and growing pains brought expansion to the campus, which continues to grow to meet the demands of the surrounding communities.

By its twenty-fifth anniversary in 1980, Cerritos College had educated nearly 250,000 students since it first opened its doors at Excelsior High School. Course offerings had expanded, a satellite campus program had been implemented, and the faculty and staff had grown as the community needs increased. Cerritos College received its first ever Federal Title III Grant in 1986. The grant was in the amount of $500,000 renewable for five years, totaling 2.5 million dollars.

Over the last few years, the college has undergone major renovations. In 1994, the Wilford Michael Library and Learning Resource Center (LRC) underwent another major renovation and expansion. The library expanded from 22,000 square feet to over 40,000 square feet. The old card catalog was replaced with an automated on line system as a result of a major financial gift by the Associated Students of Cerritos College (ASCC). A modern teleconference center and learning assistance lab were added to the east wing of the Learning Resource Center.

The student center was renovated in 1995, funded by a three-way partnership between the ASCC, the college district and the state. Unchanged since its doors first opened, the student center was completely remodeled from the main floor to the adjacent culinary arts food service area. The renovation also included a four-restaurant food court with both indoor and outdoor casual dining for students.

In fall of 1998, Cerritos College opened the doors to the “One-Stop” Student Services Center. The new center houses a full spectrum of student resources including admissions and records, academic counseling, financial aid, the Scholars’ Honors Program, veteran’s affairs, EOPS (Extended Opportunities Programs and Services) and university transfer assistance. Each department is equipped with high-speed computers, designed to provide immediate access to the college’s network.

In addition, the college’s Career Services and Job Placement Centers have been moved within a short distance of the “One Stop” Student Services Center, making it the central hub of all Student Services and enrollment activities.

Also in the fall of 1998, the second phase of the Learning Resource Center opened, featuring a computer lab more than 500 high-speed personal computers and 699 data ports. The dual-level computer labs provide students with access to the latest software, high-speed Internet and tutorial programs. In addition, there are dedicated labs for reading, math, English and foreign languages. This renovation of the LRC was part of a $12 million investment in a technology infrastructure that also included the “wiring” of the entire campus and the placement of a networked PC on the desk of each employee. As a result, Cerritos College became “the most technologically advanced community college in the state” for teaching and learning.

In 1999, the ASCC underwrote the development of Falcon Square, formerly a cement quad situated at the heart of the campus. Falcon Square is a wonderful area for students to relax or study in front of a split face block waterfall with concrete seat caps and slate covering. As part of the renovation, a 300-seat outdoor amphitheater was built in front of the College’s music building.

Cerritos College takes pride in the quality of their outstanding faculty. In 1995, Economics Professor Dianne Keenan was selected as the “Community College Professor of the Year” by the National Carnegie Foundation for the Advancement of Teaching. In 1999, Mathematics Professor Susan Parsons was recognized as the nation’s “Outstanding Community College Faculty Member of the Year” by the Association of Community College Trustees (ACCT). Cerritos College is highly diverse. Across the nation, it is the fourth largest Hispanic-serving community college. Furthermore, it is home to more than 300 international students representing 34 countries. With the turn of the millennium, expansion began to take on a new face at Cerritos College. Instead of adding onto the campus as in the past, Cerritos College began to develop global partnerships with the aid of technology. This became extremely beneficial to education in the aftermath of September 11, 2001, when pursuing cross-cultural educational opportunities became more challenging.

In late 1999, a partnership began between Cerritos College and the University of Wisconsin-Stout (UW-Stout). The two colleges began to hold joint class sessions in real time with the use of a TV screen and the Internet. Not only did this allow Cerritos College students to exchange ideas with students in another part of the country, but it also allowed Cerritos’ ethnically diverse student body to exchange points of view on United States history with the predominately Caucasian population at UW-Stout.

In 2003, the concept of the virtual classroom once again expanded, and Cerritos College entered into a similar partnership with International Pacific College (IPC) in New Zealand. For the first time ever at Cerritos College, two hemispheres were connected in real time and students participated in multi-national approaches to world history. Both the partnership with UW-Stout and IPC also allowed for a handful of Cerritos students to visit their partner campuses and experience “hands on” what they had been experiencing via technology.

In 2002, the ground work was set for Cerritos College to launch into the world of tribal technology with the American Indian Community. In 2003, the college began offering online courses offering custom training for American tribal governments. Cerritos College was awarded a $50,000 Verizon Foundation Grant for the pilot phase of their program, and its first workshop to promote the program was attended by over 15 tribes from California, Arizona, Oklahoma, Idaho and Nevada.

Currently, three online courses are being offered to tribal governments. Now, not only is Cerritos College serving the communities of Artesia, Bellflower, Cerritos, Downey, Hawaiian Gardens, Lakewood, La Mirada and Norwalk, but it is also serving locations in Wisconsin, New Zealand, Bolivia and American Indian community.

With technology on the rise, Cerritos College is also raising the bar on global partnerships and is making a direct impact on globalization in education by forging ahead into the previously unthread waters of international education right here at home.

Pursuant to its service in the community, the board of trustees adopted a revised mission statement for the college in January 2005: The Cerritos College mission is to serve the community by building futures through learning.
VISION
Driven by the pursuit of unparalleled student success, Cerritos College will provide access to innovative learning opportunities that promote the power of learning.

PHILOSOPHY AND OBJECTIVES
Cerritos College is a community-oriented institution that embraces diversity, innovation, and active learning. We strive for high academic and ethical standards, as well as academic freedom. We believe in the worth and dignity of our learners, regardless of age, gender, ethnicity, or disability. In educating, we consider the learner’s cognitive growth, and seek to foster emotional and physical well-being. The College prepares individuals for full participation in a complex democratic society, as citizens and leaders, for the fulfillment of personal goals and the future of the region. We believe that the purpose of education is to enlighten and enhance the quality of life.

MISSION
The Cerritos College Mission is to serve the community by building futures through learning.
Admission to the College

Admission to Cerritos College is open to any high school graduate or equivalent or persons eighteen years of age or older and shows evidence of being able to benefit from instruction. Students entering any of the public community colleges of California are subject to the residence requirements as determined by the State of California. A student is eligible to attend Cerritos College whose legal residence is within the state of California. Residents of any other state or foreign country may be subject to non-resident tuition.

The legal residence of any unmarried student under 18 years of age is considered to be that of the parent or guardian. The student should be prepared to present proof of residence.

Cerritos College does not discriminate against any person in employment or college participation because of race, color, religion, sexual orientation, sex, handicap or age.

Further inquiries may be directed to the Office of Admissions and Records at (562) 860-2451, Ext. 2211 or the Cerritos College website at http://www3.cerritos.edu/student-services/admissions/.

APPLICATION

All students requesting admission to Cerritos College must file an application for admission in the Admissions and Records Office (Early submission of admission applications is recommended). It is the responsibility of applicants to submit honest and true information; any deliberate falsification of information on the application or residence verification may be grounds for dismissal from the College.

Upon receipt of admission application, Admissions and Records will issue Falcon Phone enrollment appointments. Additionally, a student identification number will be issued to applicants. A student identification number is necessary to complete the matriculation process: assessment testing, counseling appointment, and enrollment.

TRANSCRIPTS

It may be necessary to submit transcripts from previous schools, colleges and universities for the establishment of prerequisite eligibility. Transcripts verifying units from other institutions may be used to complete CSU General Education requirements, IGETC requirements, Certificates of Achievement and Associate of Arts Degrees.

ADMISSION OF HIGH SCHOOL STUDENTS (VEYSEY PROGRAM)

The Veysey program represents a cooperative venture between Cerritos College and its neighboring high schools. Under the terms of this program, juniors and seniors at least 16 years of age may take college courses to achieve three important purposes:

1. Advanced academic work: High school students can get a headstart in their college major or in completing college graduation requirements.
2. Vocational-technical career courses: Students can take courses not available in a high school or can obtain advanced work beyond the scope of a high school’s vocational program.

Upon recommendation of the high school and with parental consent, high school juniors and seniors may take classes at Cerritos College. High school students may enroll in courses and possibly receive both high school and or college credit, but must also attend a minimum day at the high school. Enrollment in the summer session immediately prior to the junior year is also open to high school students. No enrollment fee (with the exception of health and student ID fees) will be charged to concurrently enrolled high school students. Veysey students will not be eligible for continuing student enrollment dates. Interested students should contact their high school counseling office or the Cerritos College School Relations Office at (562) 860-2451, Ext. 2130 for more information.

Students who need accommodations due to a disability should make arrangements for these through their K-12 school district, in consultation with the DSP&S office at Cerritos College.

ADMISSION OF MINORS

The College may admit as a part-time or full-time student in grades kindergarten through 10 (K-10) an advanced student who, in the opinion of the Dean of Counseling Services or designee and designated faculty, may benefit from instruction offered. These students may only take college credit courses which are designated as associate in arts degree applicable. No exceptions will be made.

This is not a remediation program. For example, if a student fails or does poorly in a particular course(s) at his/her school, Cerritos College is not an alternative institution through which deficiencies can be made up. The minors program for under-aged students is for advanced students who desire to take courses that are not available at their schools.

Minor students applying for admittance must meet the following criteria:

1. Submit an application for admission to Cerritos College.
2. Submit a completed Concurrent Enrollment Approval form each term or semester of attendance.
3. If applying to take academic courses (e.g., math, English, history, biology, etc.), submit an unofficial transcript or most recent report card to the Dean of Counseling Services or designee.
4. Enroll in 11.5 units or fewer.
5. Demonstrate the ability to benefit from more advanced scholastic or vocational work than is available in the K-10 setting as determined by the Dean of Counseling Services or designee and designated faculty and staff.
6. Be authorized to attend Cerritos College by the Public School District if the student attends public school.
7. Undertake courses of instruction of a scope and duration sufficient to satisfy the requirement of law.

Minor students are not eligible for continuing student enrollment dates but are exempt from per unit fees.

Students who need accommodations due to a disability should make arrangements for these through their K-12 school district, in consultation with the DSP&S office at Cerritos College.

ADMISSION OF INTERNATIONAL STUDENTS

The International Student Center welcomes F-1 international students to attend Cerritos College. The Center provides international students assistance with admissions, counseling, immigration advisement, cultural adjustment and educational support while they pursue their academic goals. We assist international students in their relations with the United States Citizenship and Immigration Services (USCIS) under the Department of Homeland Security and other U.S. and foreign governmental agencies while they maintain proper immigration status at Cerritos College. Mandatory medical insurance is required for all F-1 students attending Cerritos College. Visit our website at www.cerritos.edu/ispa or call us at (562) 860-2451, ext. 2133, for further information or for an international student application package.
DOCUMENTATION REQUIRED:

- Application
- Fee of $40 for new student (fee of $25 for readmit student)
- Statement of Support
- Bank Certification (verification on bank letterhead signed by a bank official showing at least $21,000 USD available to the student or equivalent.)
- TB exam results
- Transcripts (proof of high school graduation)
- TOEFL, S.T.E.P., and/or Cerritos College Placement Test or equivalent
- Copy of Passport, Visa, and I-94
- Copy of ALL I-20's
- Transfer Authorization (if applicable)
- Proof of Medical Insurance Coverage (available in the International Student Center)

Costs: Approximate fees and accommodations for one year: (Subject to change)

- Application fee .................................$40
- Tuition and enrollment fee* ($212.00 per unit) .......... 7,000
- Books and supplies. ................................1,600
- Student Health Fees ...............................28
- College student ID Fee ............................20
- Health Insurance (mandatory) .......................600
- Living expenses (Approx.) ........................11,840
- Parking permit (optional if you have a vehicle) ...........40
- Approx. total for the year: ...........................$21,168
- Approx. tuition fees per semester based on 12 units: ....$2,600

*Fees are subject to legislative changes without prior notice.

SEVIS Fee (Form I-901): Once a new initial I-20 is issued, a Form I-901 along with a payment of $100 SEVIS fee must be completed before applying for or a re-validation of the F-1 Visa status. For information on paying the SEVIS fee, go to www.FMJfee.com.

For further information contact:
Cerritos College
The International Student Center
11110 Alondra Blvd.
Norwalk, CA 90650-6298  U.S.A.
E-mail: dkurtz@cerritos.edu
Phone: (562) 860-2451 ext. 2133
Fax: (562) 467-5086

Expenses

The cost of textbooks, supplies, and equipment will depend upon the number or kinds of courses taken. Textbooks and supplies are sold in the college bookstore. Additional fees as noted below must be paid at time of registration:

STUDENT FEES

1. Enrollment fees for the community college student is $26 per unit. FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE DUE TO STATE LEGISLATION.

2. Students who are non-residents of California will also be subject to non-resident tuition fee of $160 per unit. International student fee is $186 per unit, PAYABLE AT TIME OF REGISTRATION. Active military personnel and their dependents are exempt for one year from this out-of-state tuition charge. Non-resident students who have been admitted to a class or classes without payment of the fee because of falsification of information submitted by or for them, shall be subject to dismissal from college. If the above fees are not paid during the same day of registration, your complete program will be dropped and you will have to re-register.

3. Student Health Fee is $14.00 per semester, $11.00 for Summer Session.

4. College Services I.D. Fee is $10.00 per semester, $4.00 for Summer Session.

5. Parking fees provide security and maintenance of parking lots. On-campus parking for automobiles is $20.00 per semester and $10.00 for Summer Session for students. Mopeds and motorcycles may use designated areas at no charge.

REQUIRED INSTRUCTIONAL AND OTHER MATERIALS POLICY

Students may be required to purchase instructional and other materials required for a credit or noncredit course. Such materials shall be of continuing value to a student outside of the classroom setting and shall not be solely or exclusively available from the District. (Title 5 Cal. Admin. Code Sec. 59400)

Any questions with respect to the interpretation of this regulation shall be in writing and addressed to the College’s Vice President of Academic Affairs.

REFUND POLICIES AND PROCEDURES

It is the student’s responsibility to apply for a refund. A student is eligible for a refund after classes have been officially dropped. Classes must be dropped by the appropriate deadline for the session in order to be eligible for a refund. A student is eligible for a refund if:

a. classes are dropped by the required deadline;

b. the program change is the result of action taken by the district to cancel or reschedule a class;

c. the student is dropped for failure to meet a prerequisite(s) or corequisite(s); and/or;

d. the student is active or reserve U.S. military personnel who withdraw due to military orders.

The above listed eligible students may file a petition with the district requesting refund of their registration fee(s). A refund will not be processed if academic credit has been awarded for the class. Refunds will be mailed after your application is filed in the Admissions and Records office. Be sure your address is correct at the time you file. To an officially withdrawn student, the following refund guidelines apply:

1. Enrollment Fee, Non-Resident Tuition, and International Student Tuition - Fall and Spring Semester, Summer Session and Short-Term Classes - A student will be fully refunded if classes are dropped within the drop dates published in the Schedule of Classes. There are no exceptions to the published drop dates.
2. **Student Health Fee** - A student will be fully refunded if all classes are dropped within the drop dates published in the Schedule of Classes. There are no exceptions to the published drop dates.

3. **College Services I.D. Fee and Parking Fees** - A student will be fully refunded if all classes are dropped within the drop dates published in the Schedule of Classes. If the student paid for but did not receive their Student I.D. Card or parking sticker, he/she must pick them up before applying for the refund. The Student I.D. Card and parking sticker must be surrendered at the time the student applies for the refund. There are no exceptions to this requirement.

Refunds are made pursuant to Title 5, Section 58501 or 58501.1, for program changes made during the first two weeks of instruction for a primary term-length course (18 weeks) or by the ten percent point of the length of a short-term course (15 weeks, 9 weeks, 6 weeks, etc.).

*Example:* 15 weeks class x 5 working days = 75 x 10% = 7.5. The result is rounded to allow 8 days to drop a class and be eligible for a refund.

**ONE YEAR LIMIT ON REFUNDS** - Classes must be dropped before filing for a refund. Students seeking refunds must meet the requirements listed above to be eligible. Students must have dropped the class(es) and met the appropriate deadlines before filing for a refund. If these conditions have been met, students have one year from the beginning of the semester in which fees were paid to apply for their refund. Beyond the one year limit, students will no longer be eligible.

**Bad Check Regulations**

A $10.00 fee will be charged for all returned and stop payment checks. All fees are subject to change without notice in accordance with any action taken by the Board of Trustees. Under Assembly Bill 1226, any person who writes a check on or after January 1, 1984, which is dishonored for lack of funds is civilly liable, and under the law, is liable for three times the amount of the check, plus the face value of the check.

**Failure to Pay College Financial Obligations**

Failure to pay college financial obligations may result in the withholding of grades, transcripts, diplomas, or registration privileges.

a. The failure by a student to pay a proper financial obligation due to the college or district may result in the withholding of grades, transcripts, diplomas, or registration privileges or any combination thereof.

b. Prior to instituting any such hold, a written notice of a student's failure to pay a financial obligation due the college or district shall be given to the student.

c. The decision to withhold any of the above may be appealed to the president/superintendent or his/her designee.

d. The item or items being withheld shall be released when the student pays the financial obligation. (Education Code Section 72237)

**Incidental**

Students are expected to furnish all textbooks, supplies, and uniforms as needed for instruction. The materials may be purchased through the student store which is operated by the Associated Students. In laboratory courses, students are charged actual cost of items lost or broken. Fines are assessed in the library for lost or overdue books.
Matriculation

Matriculation is a process designed to help students in planning, choosing, and achieving educational goals. The process brings the college and a student into an agreement for the purpose of realizing the student’s educational goal using the college’s established programs, policies, and requirements. The agreement acknowledges responsibilities of both the college and the student to attain those objectives. The main purpose of matriculation is student success.

Listed below are the basic components of the matriculation partnership shared between the college and the student.

The college agrees to provide:
- An admissions application process.
- An orientation to the College’s programs and services.
- An assessment of the student’s study skills, English language proficiency, computational skills, aptitudes, goals, learning skills, career aspirations, academic performance, and need for special services.
- Counseling and advisement to develop an educational plan.
- Follow-up evaluation of each student’s progress in achieving an educational goal.

The student agrees to:
- Express at least a broad educational intent upon admission.
- Declare an educational goal before or during the term after which the student completes 15 units.
- Attend class.
- Work diligently to complete course assignments.
- Demonstrate an effort to attain an educational goal.
- All new students are required to participate in the matriculation partnership activities. Students who have completed an associate degree or higher at an accredited post-secondary institution are exempt from the partnership. However, exempt students may choose to participate in any portion of the matriculation process.
- Alternate arrangements are available for students with physical, communication or learning disabilities, or who are on financial aid and are determined as EOPS eligible students. Contact the Counseling Center for details. Outlined below are guidelines designed to help you complete the matriculation process.
- Failure to comply with matriculation regulations, declaring an educational goal and developing an educational plan may result in the termination of matriculation services to the student.

For additional information, visit the matriculation website at http://www3.cerritos.edu/student-services/counseling/cg-matric.html.

ADMISSIONS

Complete and submit the Cerritos College admissions application to the Admissions and Records Office, located in the Administration Building or at www.cerritos.edu. Transcripts from other institutions will be required to prove prerequisite eligibility which is strictly enforced at enrollment.

ORIENTATION

After completing assessment testing, sign up for an orientation workshop at the appointment desk in the Counseling Office or make an appointment by calling (562) 860-2451, extension 2231. There are both day and evening orientation workshops.

Day workshops include: campus information, preparation for registration, and a campus tour.

The evening workshop is designed for adults returning to school. It includes campus information and preparation for registration.

Students are encouraged to receive assessment PRIOR to attending an orientation workshop.

Orientation and Educational Planning classes are available throughout the semester. Online orientation is available on the college website at www.cerritos.edu/counseling.

EXEMPTIONS: Re-admit and transfer students.

ASSESSMENT/PLACEMENT

The Career Services Center offers the following services to assist students in exploring and planning their academic and vocational futures:

(1) Assessment/Placement Testing
(2) CalWORKs
(3) Career Planning
(4) Student Employment-Job Placement
(5) Transfer Center
(6) Re-entry Program

The Career Services Center is located in the Administration Building.

“ASSESSMENT/PLACEMENT” means the process of gathering information about an individual student to facilitate his or her success. At Cerritos College, assessment includes, but is not limited to, the collection of information regarding student’s study skills, English language proficiency, computational skills, high school and/or college transcript review, evidence of A.A. degree or higher from an accredited institution, learning skills, academic performance, and need for special services. In addition, career assessment is the opportunity to explore career aspirations, goals, skills, interests, aptitudes and values.

Do I Need to Take an Assessment/Placement Test?

If you plan to enroll in a math, English, ESL (English as a Second Language), or reading class or if you plan to earn an A.A. degree, it is strongly recommended that you take assessment/placement tests prior to enrollment.

Please note: The exceptions listed are assessment options for clearance or placement. To meet the required reading, math, and English proficiencies necessary to qualify for the Associate in Arts Degree, check your catalog or ask a counselor.

Assessment/Placement Testing Schedule

Copies are available at the Admissions and Records Office, Counseling Office, Career Services Center, and the college website at www.cerritos.edu/career-services; or call (562) 860-2451, Ext. 2355 for dates and times.

Assessment/Placement Test Schedule Exemptions

Students who already possess an A.A. degree or higher are not required to take assessment/placement tests, but will be required to verify the degree by presenting official documents to the Admissions and Records Office at least one week prior to enrollment.
Basic Math Readiness

If you have completed Algebra 1 or higher with a “B” grade or higher at a high school or an accredited college, you are exempt from the Basic Math Assessment. Please submit official proof (grade reports or transcripts) to a counselor prior to enrollment.

Accommodations for English as a Second Language

Students planning to take ESL (English as a Second Language) courses need to take the CELSA placement exam.

May I Retake a Test?

Students are allowed to retake tests using the following schedule:

<table>
<thead>
<tr>
<th>Test</th>
<th>Retake Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Math Readiness</td>
<td>May be repeated one time AFTER one semester waiting period.</td>
</tr>
<tr>
<td>Intermediate Algebra Readiness</td>
<td>May be repeated one time AFTER one semester waiting period.</td>
</tr>
<tr>
<td>Advanced Math Readiness</td>
<td>May be repeated one time AFTER one semester waiting period.</td>
</tr>
<tr>
<td>Calculus</td>
<td>May be repeated one time AFTER one semester waiting period.</td>
</tr>
<tr>
<td>Reading</td>
<td>May be repeated one per semester.</td>
</tr>
<tr>
<td>English</td>
<td>May be repeated one time AFTER one semester waiting period.</td>
</tr>
<tr>
<td>ESL/CELSA</td>
<td>May be repeated one time AFTER one semester waiting period.</td>
</tr>
</tbody>
</table>

Accommodation for Special Needs

Any student with a verified disability may arrange an appointment for alternative administration of English, reading, mathematics, and ESL placement tests by contacting Disabled Student Programs and Services, (562) 860-2451, Ext. 2333. Alternative administration may include extended time, large print, readers or writers.

COUNSELING

All new students are advised to see a counselor for course approval prior to enrollment. Students who are on academic or progress probation are required to complete a contract with a counselor prior to enrollment. Students who have not declared an educational goal and students who are enrolled in pre-collegiate basic skills courses are highly encouraged to meet with a counselor to develop an educational plan. Readmit and transfer students are also advised to see a counselor.

All students are encouraged to meet with a counselor every semester to ensure that their educational plan accurately reflects their educational goal.

Follow-up

Counseling and teaching faculty provide a number of follow-up services to matriculated students. These services are designed to provide information regarding the students’ academic progress. Special services are provided to students on academic and/or progress probation, students in basic skills courses, and students who are undecided about their educational goal. Referrals are made to on and off campus services when appropriate.

What are Prerequisites, Corequisites and Recommendations?

It is the intent of Cerritos Community College to guide students into courses in which they will have the greatest chance for academic success. Therefore, the student will find courses which have prerequisites, corequisites and/or recommendations in their descriptions. This is the case when a specific body of knowledge or skill(s) must be learned or demonstrated before the student can be expected to successfully progress to the second-level course. For example, ENGL 52 (formerly ENGL 50.2) must be taken before ENGL 100. This is an example of courses that must be taken in sequence. Students are encouraged to consult the course descriptions found in the current college catalog for the identification of the prerequisites for a course.

Automated prerequisite checking will stop you from enrolling in a class that has a required prerequisite you have not yet met. To avoid denied enrollment, please complete the Cerritos College placement tests or submit transcripts* if prerequisite coursework was completed at another institution. *Transcripts and or grade cards accepted in the Admissions and Records Office. Complete the Requisite Clearance Request Form available from Counseling, Admissions and Records, or download from www.cerritos.edu/prerequisite.

Following are the definitions for prerequisites, corequisites and/or recommendations for course preparation:

1. A prerequisite is any requirement which must be satisfied before a student may enroll into a course. In other words, “prerequisite” means a course that a student is required to complete in order to demonstrate current readiness for enrollment in a course or educational program. The prerequisites offered at Cerritos College are listed with course titles in the “Announcement of Courses” section of the catalog and in the current Schedule of Classes.
2. “Corequisite” means a course that a student is required to take at the same time with another course. For example, if a student enrolls in PHAR 40L, he/she must take PHAR 60 at the same time.
3. “Recommendation” for course preparation means a condition...
of enrollment that a student is strongly suggested to meet before or along with enrollment in a course or educational program but is not required to do so.

4. “Credit grade” is at least a grade of “C” (satisfactory). Credit will not be granted for substandard course work (“D” or “F”).

5. “Satisfactory grade” means that, for the course in question, the student’s academic record has been annotated with the symbol A, B, C, or “CR”.

**What is the Prerequisite Challenge Procedure for Students?**

A prerequisite may be waived by the institution for students who have presented the appropriate reasons and who have the appropriate experience.

If you believe that you meet the requirements, then you may challenge a prerequisite. A Requisite Clearance Request Form can be obtained upon request from the Admissions and Records Office, Counseling Center or download from www.cerritos.edu/prerequisite.

It is the student’s responsibility to provide information to support the clearance. The petition must be filed and resolved prior to the student’s enrollment appointment time.

Criteria for challenging a course are:

1. You have the knowledge or the ability to succeed in the course without the prerequisite. **OR**

2. The course which provides the prerequisite is not available. **OR**

3. You believe that the prerequisite is discriminatory or is being applied in a discriminatory manner. **OR**

4. You believe that the prerequisite was established in violation of regulations and/or the established District-approved policy and procedures.

Students must bring transcripts from other colleges/universities or high schools with them to their counseling appointment to establish that prerequisites have been met. The counselor will review the college/university catalog published the year the course was taken.

Once you have completed the Requisite Clearance Request Form, your challenge will be reviewed by a Prerequisite Challenge Committee, which consists of a member of the appropriate department and the instructional dean. You will be informed in writing or by mail of the committee’s determination within five (5) working days. If you are dissatisfied with the decision rendered by this body, you may appeal that decision by completing the Cerritos college Requisite challenge and Waiver Form.
Enrollment Information

COUNSELING

Of major importance to every student enrolled at Cerritos College is the comprehensive counseling service that is provided to assist students in achieving their educational goals as fully, smoothly, and as efficiently as possible. The constant change of requirements and prerequisites for institutions and occupations make continuing contact with the Counseling staff a vital part of the student’s successful academic experience.

The counseling service consists of four major functions:

1. assistance in planning academic programs:
2. assistance in exploring career possibilities:
3. consultation and referral regarding personal problems:
4. provision of additional auxiliary services, such as personal development classes, articulation with transfer institutions, referrals to outside agencies, orientation classes, and placement interpretation.

These various services are offered by a professional staff of credentialed counselors trained to help students in the appropriate areas of their concerns. The counseling staff works closely with all divisions of the College and keeps abreast of the educational programs both here and at the four-year institutions.

Although the use of counseling services is on a voluntary basis, all entering freshmen, students on probation, students transferring in from other schools, F-1 VISA students, and students on financial aid are required to meet with a counselor for program planning and approval before enrollment. Generally, students should schedule conferences each semester. Counseling appointments may be made in person at the Counseling Center located in the Administration Building or by telephoning (562) 860-2451, Ext. 2231. Limited walk-in counseling is also available. General academic counseling is available online at www.cerritos.edu/counseling.

Due to the high volume of students seeking counseling before the start of each semester, appointments are not made during the four weeks prior to each semester. Only walk-in counseling is available during this time. Contact the Counseling Center for hours scheduled for walk-in counseling.

ENROLLMENT

Students are considered officially enrolled when all fees have been paid in full. Grades and/or credit will not be given to students who are not officially enrolled.

Enrollment dates, procedures and policies can be found in the Class Schedule. The Class Schedule is published for each term.

ADMISSION TO CLASS

Students must be officially enrolled before attending any class. If students are unable to attend the first class meeting, every effort should be made to contact the instructor(s) or the instructor(s) may drop the student as a "no show".

Students seeking admission into a “closed” class must attend the first day of class. Instructors may add students depending on seat availability and students’ completion of prerequisites, if applicable.

It is the policy of Cerritos Community College District that, unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for state aid, wherever offered and maintained by the district, shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established.

AUDITING COURSES

Auditing courses is permitted at Cerritos College. An auditor is a student who attends a course or courses for no credit or notation on an official transcript. Auditing may be available, pending instructor’s signed permission, for any student who wishes to attend a course for information, review purposes or skill building. Students wishing to audit should be aware that audited courses will NOT appear on an official transcript.

1. Students may not audit a course unless he/she has exhausted all possibilities to take the course for credit.
2. Permission to audit a course is granted at the discretion of the instructor and with the instructor’s signed permission.
3. With the instructor’s signed permission a student may enroll for audit status anytime during the semester after the first day of the course. (The first day of the course refers to the actual first course meeting.)
4. An auditor may be allowed to elect credit in lieu of audit prior to end of the 5th week of school for a semester length course or prior to 30% of a course for a short-term course, with instructor written permission. No refund of audit fees will be available and all credit fees must be paid in full at the time of credit election.
5. A credit student may be allowed to elect audit status in lieu of credit prior to end of the 5th week of school for a semester length course or prior to 30% of a course for a short-term course, with instructor written permission. No refund of credit fees will be available after refund deadline and all audit fees must be paid in full at the time of audit election.
6. Credit students have priority over auditing students.
7. The fee to audit a class is $15.00 per unit (in addition to the student fees). Students enrolled in 10 or more units can audit 3 units free (may be 3 one unit classes). The $15.00 per unit audit fee will automatically be charged if the student drops below 10 units.

ADD/DROP PROCEDURES

If you wish to change your class schedule, please follow the steps below:

Complete an Add/Drop card (available in the Admissions and Records Office) or for a faster response, add via MyCerritos (http://my.cerritos.edu, Enrollment) or Falcon Phone.

If the class is closed, you must go to class on the first day and time that it meets; be on time. Respectfully request of the instructor(s) to be added to the class(es); if the instructor approves, an electronic enrollment will be submitted on your behalf to Admissions and Records. Please note that prerequisites and holds (service indicators) will be checked. Payment for each class added is due within 5 days of your request. Please check your student account via MyCerritos (http://my.cerritos.edu, Student Accounts), Falcon Phone or in the Admissions and Records Office. All enrollments must be completed by the listed add deadlines.
DROP
Pursuant to Title 5, section 58004 and Cerritos College Board Policy 4104, it is the student's responsibility to participate fully in class(es), once enrollment is complete. However, should it become necessary to withdraw from a class, it is the student's responsibility to present to the Admissions and Records office, a student signed drop card.

It is the responsibility of the instructor to withdraw student(s) based on "no show" or lack of participation.

It is recommended that students take the initiative to officially withdraw themselves.

Failure to officially withdraw from class(es) may result in an "F" grade for each class(es).

To officially withdraw after registration ends, drop the course(s) via “My Cerritos” at www.cerritos.edu or Falcon Phone. Be sure to verify the withdrawal with a printed receipt.

Deadlines for withdrawal from a class or classes shall be authorized through the last day of the 14th week of an 18-week term or 75% of a shorter than 18-week term, whichever is less. The academic records of a student who remains in a class beyond the date allowed for withdrawal must reflect an authorized symbol, other than a "W".

"W's" are considered honorable withdrawals and shall not be used in calculating grade point averages. However, excessive "W's" shall be used as factors for probation and dismissal procedures. Additionally, a student who has a withdrawal ("W") in the same course two or more times, loses the privilege of priority registration for that course. Students may submit a Petition for Course Repetition, which is subject to approval or denial, to the Academic Records and Standards Committee for exceptions to the Excessive "W" policy for course repetition.

DROPPING A CLASS(ES) AFTER THE DROP DEADLINE
Students must have documented, circumstances beyond his/her control to initiate a drop after the listed deadline. Examples of circumstances beyond the control of the student include, but are not limited to, the following: accident, illness, change in work schedule, or other documented circumstances. A "W" will be posted to the official transcript. See the Dean of Admissions and Records if you need further information.

STUDY LOAD
In order to meet graduation requirements in four semesters, students must carry an average of 16 units of credit each semester. Students desiring to enroll in more than 18 units must have the approval of a counselor. Other unit limitations are:

Foreign Visa Students not less than 12 units.
Intercollegiate athletes not less than 12 units.

REPETITION OF COURSES
Course repetition allows such courses for which substandard work has been recorded, to be repeated only once. The previous grade and units will be disregarded in the computation of Cerritos College grade point average. When course repetition occurs, permanent academic work shall be annotated in such a manner that all work remains legible ensuring a true and complete academic history. The following policies apply to course repetition.

Students may use equivalent course work from an accredited college or university to replace a Cerritos College course in which substandard work was recorded.

Courses designated as repeatable are indicated following this section.

Exceptions to the Course Repetition Policy
Students may petition the Academic Records and Standards Committee for consideration of exceptions to the policy.

Examples of Exceptions:
1. Student received two, substandard grades or "W's," or any combination.
2. Student’s previous grades are a result of documented circumstances beyond his/her control.
3. Curriculum changes have occurred.
4. Repetition is necessary for legally mandated training. *Such courses may be repeated any number of times, regardless of whether or not substandard work was previously recorded, and the grade received each time shall be included for purposes of calculating the student's grade point average. (Title 5, Division 6, Ch 6 Subchapter 9, §55763)

Cerritos College has identified the courses listed below as repeatable under the above guidelines for the maximum number of units listed.

PLEASE NOTE
The computer system checks for course repetition at the time of enrollment. A program to check for course repetition is run before the semester begins and again at check points during the first part of the semester. A student attempting to repeat a course which is nonrepeatable under the above guidelines is automatically dropped from the course.
<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>TIMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 50A</td>
<td>Body Trim and Minor Repairs</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 50B</td>
<td>Panel Replacement</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 50C</td>
<td>Structural Repair Set-Up</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 52</td>
<td>Structural Damage Repair</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 53</td>
<td>Suspension, Alignment and Power Train Damage</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 54</td>
<td>Advanced Design Automotive Panel Repair</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 55</td>
<td>Structural Panel Replacement</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 57</td>
<td>Structural Automotive Welding</td>
<td>2.0</td>
<td>3</td>
</tr>
<tr>
<td>AB 58</td>
<td>Collision Repair Update</td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>AB 59A</td>
<td>Computerized Measuring</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 59B</td>
<td>Unitized Body Analysis</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 59C</td>
<td>Full Frame Analysis and Repair</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 59E</td>
<td>Full Frame Repair - Gauges</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 60A</td>
<td>Sanding and Paint Preparation</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 60B</td>
<td>Mixing and Application of Paint</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 60C</td>
<td>Paint Defects Causes and Cure</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 61</td>
<td>Preparation and Spot Refinishing</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 62</td>
<td>Overall and Multi-Coat Refinishing</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 63</td>
<td>Production Refinishing</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 65</td>
<td>Mixing and Adjusting Color</td>
<td>2.0</td>
<td>3</td>
</tr>
<tr>
<td>AB 66</td>
<td>Lettering, Striping &amp; Design</td>
<td>2.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 68</td>
<td>Refinishing Update</td>
<td>4.5</td>
<td>4</td>
</tr>
<tr>
<td>AB 73/74</td>
<td>Auto Collision Rep Occ Work Experience</td>
<td>3-4</td>
<td>4</td>
</tr>
<tr>
<td>AB 75</td>
<td>Body Panel Modification</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 76</td>
<td>Partial-Pan Fabrication</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 77</td>
<td>Full-Pan Fabrication</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 79</td>
<td>Automotive Fabrication Projects</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 80</td>
<td>Autobody Customer Service</td>
<td>2.0</td>
<td>4</td>
</tr>
<tr>
<td>AB 80A</td>
<td>Vehicle Staging</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 80B</td>
<td>Damage Analysis and Automotive Systems</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 80C</td>
<td>Vehicle Types and Customer Relations</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 83A</td>
<td>Computerized Damage Estimating-ADP</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 83C</td>
<td>Computerized Damage Estimating-CCC</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 83M</td>
<td>Computerized Damage Estimating-Mitchell</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>AB 86</td>
<td>Production Management</td>
<td>2.0</td>
<td>4</td>
</tr>
<tr>
<td>AB 88</td>
<td>Estimating and Management Update</td>
<td>3.0</td>
<td>4</td>
</tr>
<tr>
<td>AB 181</td>
<td>Non-Structural Damage Estimating</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 182</td>
<td>Structural Damage Estimating</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 183</td>
<td>Computerized Damage Estimating</td>
<td>1.5</td>
<td>4</td>
</tr>
<tr>
<td>AB 281</td>
<td>Structural Damage Analysis for Estimators</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 285</td>
<td>Collision Repair Management</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>AB 287</td>
<td>Advanced Collision Repair Management</td>
<td>2.0</td>
<td>4</td>
</tr>
<tr>
<td>AJ 173</td>
<td>Administration of Justice</td>
<td>3.0</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 251</td>
<td>Field Trips in Archaeology</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 43/44</td>
<td>Arch Drawing Occ Work Experience</td>
<td>3-4</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 123</td>
<td>Intro to 2D Computer Aided Drafting</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 213</td>
<td>Intro to 3D Computer Aided Drafting</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 221</td>
<td>Architectural CAD Working Drawings</td>
<td>4.0</td>
<td>3</td>
</tr>
<tr>
<td>ART 50</td>
<td>Chinese Brush Painting</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 114</td>
<td>Storyboard and Graphic Novel Illustration</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 115L</td>
<td>Printmaking Lab</td>
<td>1.0</td>
<td>4</td>
</tr>
<tr>
<td>ART 117</td>
<td>Intermediate Printmaking</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 136</td>
<td>Painting for Art Majors</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 144</td>
<td>Jewelry/Metalsmiting</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 145</td>
<td>Jewelry Casting &amp; Molds</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 151</td>
<td>Ceramics-Beginning Wheelthrowing</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 152</td>
<td>Ceramics-Beginning Handbuilding</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 153</td>
<td>Ceramics-Intermediate Wheelthrowing</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 154</td>
<td>Ceramics-Intermediate Handbuilding</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 155</td>
<td>Beginning Ceramic Sculpture</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>ART 156L</td>
<td>Ceramics Lab</td>
<td>1.0</td>
<td>4</td>
</tr>
<tr>
<td>ART 160</td>
<td>Life Sculpture</td>
<td>3.0</td>
<td>4</td>
</tr>
<tr>
<td>Course Code</td>
<td>Description</td>
<td>Max Units</td>
<td>Times</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td>BA 173/174</td>
<td>Business Administration Occ Work Experience</td>
<td>3-4</td>
<td>4</td>
</tr>
<tr>
<td>BA 174A</td>
<td>Business Administration Occ. Work Experience Alternate Plan</td>
<td>4.0</td>
<td>4</td>
</tr>
<tr>
<td>BCOM 152</td>
<td>Job Search in the Business Field</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>BCOT 3T</td>
<td>Business communication Word Processing or Keyboarding Tutorial</td>
<td>0.5</td>
<td>4</td>
</tr>
<tr>
<td>BCOT 5A</td>
<td>Word Module</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 5B</td>
<td>Excel Module</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 5D</td>
<td>PowerPoint/Internet Module</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 63</td>
<td>Keyboarding Speed/Control Building</td>
<td>1.0</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 173/174</td>
<td>Business Computerized Office Technologies</td>
<td>3-4</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Natural History of So. Calif.</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 180L</td>
<td>Life Science Preparations</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 250L</td>
<td>Special Topics in Biology</td>
<td>1.0</td>
<td>4</td>
</tr>
<tr>
<td>BL 171</td>
<td>Business Paralegal Occ Work Experience</td>
<td>1.0</td>
<td>3</td>
</tr>
<tr>
<td>BL 172</td>
<td>Business Paralegal Occ Work Experience</td>
<td>2.0</td>
<td>3</td>
</tr>
<tr>
<td>BL 173/174</td>
<td>Business Paralegal Occ Work Experience</td>
<td>3-4</td>
<td>4</td>
</tr>
<tr>
<td>BUSA 1T</td>
<td>Accounting Microcomputer Tutorial</td>
<td>0.5</td>
<td>4</td>
</tr>
<tr>
<td>BUSA 2T</td>
<td>Accounting Tutorial</td>
<td>0.5</td>
<td>4</td>
</tr>
<tr>
<td>BUSA 171</td>
<td>Business Accounting Occupational Work Experience</td>
<td>1.0</td>
<td>3</td>
</tr>
<tr>
<td>BUSA 172</td>
<td>Business Accounting Occupational Work Experience</td>
<td>2.0</td>
<td>3</td>
</tr>
<tr>
<td>BUSA 173/174</td>
<td>Business Accounting Occ Work Experience</td>
<td>3-4</td>
<td>4</td>
</tr>
<tr>
<td>BUSA 231</td>
<td>Current Topics in Payroll</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 2T</td>
<td>Computer-Aided Transcription Lab</td>
<td>0.5</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 50</td>
<td>Computer-Aided Proofreading</td>
<td>2.0</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 119A</td>
<td>Beginning Computer-Aided Transcription</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 119B</td>
<td>Intermediate Computer-Aided Transcription</td>
<td>3.0</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 119C</td>
<td>Advanced Computer-Aided Transcription</td>
<td>3.0</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 119D</td>
<td>Basic Concepts of Realtime</td>
<td>3.0</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 119E</td>
<td>Computer-Aided Medical Dictionary Build</td>
<td>3.0</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 119F</td>
<td>Computer-Aided Legal Dictionary Build</td>
<td>3.0</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 125</td>
<td>Computerized Shorthand Practicum I (100-130 wpm)</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 126</td>
<td>Computerized Shorthand Practicum I (120-150 wpm)</td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 127</td>
<td>Computerized Shorthand Practicum III (140-170wpm)</td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 128</td>
<td>Computerized Shorthand Practicum IV (160-190wpm)</td>
<td>4.5</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 129</td>
<td>Computerized Shorthand Practicum V (180-210 wpm)</td>
<td>5.0</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 130</td>
<td>Computerized Shorthand Practicum VI (190-225 wpm)</td>
<td>4.5</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 139</td>
<td>Exploring Career Opportunities in Court Reporting</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 141</td>
<td>Computerized Shorthand Theory</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 141A</td>
<td>Computerized Shorthand Theory Review/Development</td>
<td>1.5</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 141B</td>
<td>Computerized Shorthand Theory Review/Development A</td>
<td>1.5</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 142</td>
<td>Intermediate Computerized Shorthand</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 143</td>
<td>Computerized Shorthand Speed Building I</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 144</td>
<td>Computerized Shorthand Speed Building II</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>BUSC 145</td>
<td>Computerized Shorthand Speed Building III</td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 146</td>
<td>Computerized Shorthand Speed Building (140-170 wpm)</td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 147</td>
<td>Computerized Shorthand Speed Building (160-190 wpm)</td>
<td>4.5</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 148</td>
<td>Computerized Shorthand Speed Building (180-210 wpm)</td>
<td>4.5</td>
<td>4</td>
</tr>
<tr>
<td>COURSE</td>
<td>DESCRIPTION</td>
<td>MAX UNITS TIMES</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>CIS 189C</td>
<td>Special Topics in Software Development</td>
<td>3.0 4</td>
<td></td>
</tr>
<tr>
<td>CIS 189D</td>
<td>Special Topics in Software Development</td>
<td>3.5 2</td>
<td></td>
</tr>
<tr>
<td>CIS 211A</td>
<td>Special Topics in Database</td>
<td>1.0 4</td>
<td></td>
</tr>
<tr>
<td>CIS 211B</td>
<td>Special Topics in Database</td>
<td>2.0 4</td>
<td></td>
</tr>
<tr>
<td>CIS 211C</td>
<td>Special Topics in Database</td>
<td>3.0 4</td>
<td></td>
</tr>
<tr>
<td>CIS 271</td>
<td>Computer and Information Science Occ. Work Experience</td>
<td>1.0 3</td>
<td></td>
</tr>
<tr>
<td>CIS 272</td>
<td>Computer and Information Science Occ. Work Experience</td>
<td>2.0 3</td>
<td></td>
</tr>
<tr>
<td>CIS 273/274</td>
<td>Computer and Information Science Occ. Work Experience</td>
<td>0.5 4 3-4 4</td>
<td></td>
</tr>
<tr>
<td>COS 1</td>
<td>Cosmetology Salon Preparation</td>
<td>1.0 4</td>
<td></td>
</tr>
<tr>
<td>COS 53</td>
<td>Advanced Cosmetology Manipulation</td>
<td>6.5 3</td>
<td></td>
</tr>
<tr>
<td>COS 63</td>
<td>Advanced Cosmetology Manipulation</td>
<td>4.0 2</td>
<td></td>
</tr>
<tr>
<td>COS 70C</td>
<td>Advanced Cosmetology Manipulation</td>
<td>8.0 2</td>
<td></td>
</tr>
<tr>
<td>COS 73A</td>
<td>Advanced Cosmetology I</td>
<td>4.0 2</td>
<td></td>
</tr>
<tr>
<td>DA 1</td>
<td>Dental Radiation Safety Licensing</td>
<td>1.5 2</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>Directed Studies</td>
<td>1.0 2</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>Directed Studies</td>
<td>2.0 2</td>
<td></td>
</tr>
<tr>
<td>298</td>
<td>Directed Studies</td>
<td>1.0 2</td>
<td></td>
</tr>
<tr>
<td>299</td>
<td>Directed Studies</td>
<td>2.0 2</td>
<td></td>
</tr>
<tr>
<td>EDT 19</td>
<td>Fundamentals of Teleconferencing</td>
<td>1.0 4</td>
<td></td>
</tr>
<tr>
<td>EDT 20</td>
<td>Teleconferencing for Small Groups</td>
<td>2.0 2</td>
<td></td>
</tr>
<tr>
<td>EDT 21</td>
<td>Teleconference Telematics</td>
<td>1.0 4</td>
<td></td>
</tr>
<tr>
<td>EDT 22</td>
<td>Teleconference Review and Evaluation</td>
<td>1.0 4</td>
<td></td>
</tr>
<tr>
<td>EDT 23</td>
<td>Teleconference Production</td>
<td>3.0 3</td>
<td></td>
</tr>
<tr>
<td>EDT 24</td>
<td>Teleconference Portfolio</td>
<td>3.0 3</td>
<td></td>
</tr>
<tr>
<td>EDT 30</td>
<td>Fundamentals of Instructional Multimedia Production</td>
<td>2.0 2</td>
<td></td>
</tr>
<tr>
<td>EDT 43</td>
<td>Educational Occupation/Work Experience</td>
<td>3.0 2</td>
<td></td>
</tr>
<tr>
<td>EDT 57</td>
<td>Apple/Claris Works for Educators</td>
<td>1.0 2</td>
<td></td>
</tr>
<tr>
<td>EDT 64</td>
<td>HyperStudio Graphics</td>
<td>1.0 4</td>
<td></td>
</tr>
<tr>
<td>EDT 65</td>
<td>Advanced HyperStudio Graphics</td>
<td>1.0 4</td>
<td></td>
</tr>
<tr>
<td>EDT 67</td>
<td>Inspiration Presentations</td>
<td>1.0 4</td>
<td></td>
</tr>
<tr>
<td>EDT 68</td>
<td>Using KidPix</td>
<td>1.0 4</td>
<td></td>
</tr>
<tr>
<td>EDT 81</td>
<td>Videos for School Use</td>
<td>2.0 2</td>
<td></td>
</tr>
<tr>
<td>EL 37L</td>
<td>Troubleshooting Service and Repair Laboratory</td>
<td>2.0 2</td>
<td></td>
</tr>
<tr>
<td>EL 43/44</td>
<td>Electronics Occ Work Experience</td>
<td>3.4 4</td>
<td></td>
</tr>
<tr>
<td>EL 50</td>
<td>Electronic Tests and Measurements</td>
<td>1.5 2</td>
<td></td>
</tr>
<tr>
<td>EL 53A</td>
<td>Introduction to Microprocessors</td>
<td>3.0 2</td>
<td></td>
</tr>
<tr>
<td>EL 53B</td>
<td>Advanced Microprocessors</td>
<td>2.0 3</td>
<td></td>
</tr>
<tr>
<td>EL 55</td>
<td>Network Cabling Technology</td>
<td>2.0 3</td>
<td></td>
</tr>
<tr>
<td>EL 57</td>
<td>Electronic Project Design and Fabrication</td>
<td>1.5 3</td>
<td></td>
</tr>
<tr>
<td>EL 60</td>
<td>Computer Aided Circuit Analysis</td>
<td>1.5 3</td>
<td></td>
</tr>
<tr>
<td>EL 114L</td>
<td>Fundamentals of Digital Electronics Lab</td>
<td>1.0 2</td>
<td></td>
</tr>
<tr>
<td>ENGL 33</td>
<td>Individualized English</td>
<td>.5 4</td>
<td></td>
</tr>
<tr>
<td>ENGL 227</td>
<td>Current Literature</td>
<td>3.0 2</td>
<td></td>
</tr>
<tr>
<td>ENGL 240</td>
<td>Creative Writing</td>
<td>3.0 2</td>
<td></td>
</tr>
<tr>
<td>ENGL 241</td>
<td>Scriptwriting</td>
<td>3.0 2</td>
<td></td>
</tr>
<tr>
<td>ENGT 138</td>
<td>Fundamentals of Computer Aided Design with AutoCAD</td>
<td>4.0 2</td>
<td></td>
</tr>
<tr>
<td>ESCI 180</td>
<td>Earth Science Materials/Preparation</td>
<td>1.0 2</td>
<td></td>
</tr>
<tr>
<td>ESL 12</td>
<td>ESL Pronunciation</td>
<td>1.5 2</td>
<td></td>
</tr>
<tr>
<td>ESL 14</td>
<td>Pronunciation Plus</td>
<td>3.0 2</td>
<td></td>
</tr>
<tr>
<td>ESL 22</td>
<td>ESL Oral Communication</td>
<td>1.5 2</td>
<td></td>
</tr>
<tr>
<td>ESL 23</td>
<td>ESL Spelling</td>
<td>1.5 2</td>
<td></td>
</tr>
<tr>
<td>ESL 33</td>
<td>English for Specific Purposes</td>
<td>1.5 2</td>
<td></td>
</tr>
<tr>
<td>ESL 35</td>
<td>Editing for Advanced Grammar and Syntax</td>
<td>1.5 4</td>
<td></td>
</tr>
<tr>
<td>GEOI 100</td>
<td>Natural History of So. Calif.</td>
<td>1.0 2</td>
<td></td>
</tr>
<tr>
<td>HIST 270</td>
<td>Special Topics in History</td>
<td>3.0 2</td>
<td></td>
</tr>
<tr>
<td>HO 7</td>
<td>Cardiopulmonary Resuscitation</td>
<td>0.5 4</td>
<td></td>
</tr>
<tr>
<td>HO 9</td>
<td>Emergency Medical Technician I</td>
<td>3.0 2</td>
<td></td>
</tr>
<tr>
<td>HO 9L</td>
<td>Emergency Medical Technician I Lab</td>
<td>2.0 2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>MAX UNITS TIMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 56</td>
<td>Medication Calculations for Nurses</td>
<td>1.0 2</td>
</tr>
<tr>
<td>JOUR 50L</td>
<td>Editorial Board</td>
<td>1.0 4</td>
</tr>
<tr>
<td>JOUR 103</td>
<td>Newspaper Article Writing</td>
<td>2.0 4</td>
</tr>
<tr>
<td>JOUR 105</td>
<td>Newspaper Production</td>
<td>2.0 4</td>
</tr>
<tr>
<td>JOUR 106</td>
<td>Talonmarks.com</td>
<td>1.0 4</td>
</tr>
<tr>
<td>JOUR 120</td>
<td>Internet for Journalists</td>
<td>2.0 4</td>
</tr>
<tr>
<td>JOUR 160L</td>
<td>College Magazine Production</td>
<td>1.0 4</td>
</tr>
<tr>
<td>JOUR 170</td>
<td>Broadcast News</td>
<td>1.0 4</td>
</tr>
<tr>
<td>JOUR 171</td>
<td>Work Experience/Journalism</td>
<td>1.0 4</td>
</tr>
<tr>
<td>MA 73/74</td>
<td>Medical Assisting Occ Work Experience</td>
<td>3-4 4</td>
</tr>
<tr>
<td>MATH 5</td>
<td>Mathematics Learning Strategies</td>
<td>1.0 3</td>
</tr>
<tr>
<td>MATH 90A</td>
<td>Training for Tutors of Mathematics I</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MATH 90B</td>
<td>Training for Tutors of Mathematics II</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MET 52L</td>
<td>Metallurgy Specialty Lab</td>
<td>0.5 2</td>
</tr>
<tr>
<td>MET 73/74</td>
<td>Metallurgy Occ Work Experience</td>
<td>3-4 4</td>
</tr>
<tr>
<td>MFGT 43/44</td>
<td>Manufacturing Tech Occ Work Experience</td>
<td>3-4 4</td>
</tr>
<tr>
<td>MTTI1L</td>
<td>Numerical Control Specialty</td>
<td>1.0 4</td>
</tr>
<tr>
<td>MTT 2L</td>
<td>Mastercam Laboratory</td>
<td>1.0 4</td>
</tr>
<tr>
<td>MTT 3L</td>
<td>Virtual Gibbs</td>
<td>1.0 4</td>
</tr>
<tr>
<td>MUS 57</td>
<td>Set up and Operation of CNC Lathes</td>
<td>3.0 2</td>
</tr>
<tr>
<td>MUS 112</td>
<td>Elementary Piano I</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 113</td>
<td>Elementary Piano II</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 114</td>
<td>Intermediate Piano I</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 115</td>
<td>Intermediate Piano II</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 116</td>
<td>Voice I</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 117</td>
<td>Voice II</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 118</td>
<td>Voice III</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 119</td>
<td>Voice IV</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 120</td>
<td>Elementary Guitar I</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 121</td>
<td>Elementary Guitar II</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 122</td>
<td>Intermediate Guitar I</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 123</td>
<td>Intermediate Guitar II</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 124</td>
<td>Concert Band</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 124A</td>
<td>Beginning Band</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 125</td>
<td>Community Symphonic Band</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 125A</td>
<td>Community Band</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 126</td>
<td>Pep Band</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 127</td>
<td>Orchestra</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 128</td>
<td>Community Orchestra</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 129</td>
<td>Woodwind Ensemble</td>
<td>1.5 4</td>
</tr>
<tr>
<td>MUS 130</td>
<td>Brass Ensemble</td>
<td>1.5 4</td>
</tr>
<tr>
<td>MUS 131</td>
<td>Percussion Ensemble</td>
<td>1.5 4</td>
</tr>
<tr>
<td>MUS 132</td>
<td>Guitar Ensemble</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 133</td>
<td>Stage Band</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 134</td>
<td>Jazz Ensemble</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 136</td>
<td>String Ensemble</td>
<td>1.5 4</td>
</tr>
<tr>
<td>MUS 138</td>
<td>Community Chorus</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 138A</td>
<td>Collegiate Chorale</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 139</td>
<td>Gospel Choir</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 140</td>
<td>Pop Choir</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 141</td>
<td>Pop/Rock Ensemble</td>
<td>2.5 4</td>
</tr>
<tr>
<td>MUS 142</td>
<td>Jazz Improvisation</td>
<td>1.0 4</td>
</tr>
<tr>
<td>MUS 143</td>
<td>The Jazz and Popular Singer</td>
<td>3.0 4</td>
</tr>
<tr>
<td>MUS 144</td>
<td>Electronic Synthesizer I</td>
<td>2.0 2</td>
</tr>
<tr>
<td>MUS 145</td>
<td>Electronic Synthesizer II</td>
<td>1.0 2</td>
</tr>
<tr>
<td>MUS 146</td>
<td>Recording Techniques</td>
<td>2.0 4</td>
</tr>
<tr>
<td>MUS 147</td>
<td>Basic Applied Music</td>
<td>1.0 4</td>
</tr>
<tr>
<td>MUS 148</td>
<td>Private Study/Technique</td>
<td>1.0 2</td>
</tr>
<tr>
<td>MUS 149</td>
<td>Private Study/Musical Preparation</td>
<td>1.0 2</td>
</tr>
<tr>
<td>MUS 150</td>
<td>Private Study/Performance Practice</td>
<td>1.0 2</td>
</tr>
<tr>
<td>MUS 151</td>
<td>Piano Ensemble</td>
<td>1.5 4</td>
</tr>
<tr>
<td>MUS 152</td>
<td>Marching Brass Ensemble</td>
<td>1.5 4</td>
</tr>
<tr>
<td>MUS 160</td>
<td>Marching Percussion Ensemble</td>
<td>1.5 4</td>
</tr>
<tr>
<td>MUS 161</td>
<td>Marching Pageantry Ensemble</td>
<td>1.5 4</td>
</tr>
<tr>
<td>COURSE</td>
<td>DESCRIPTION</td>
<td>UNITS</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>-------</td>
</tr>
<tr>
<td>MUS 163</td>
<td>Drum and Bugle Corps</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS 164</td>
<td>Touring Drum and Bugle Corps</td>
<td>1.5</td>
</tr>
<tr>
<td>MUS 171</td>
<td>Work Experience/Music</td>
<td>1.0</td>
</tr>
<tr>
<td>MUS 244</td>
<td>Digital Radio Production</td>
<td>3.0</td>
</tr>
<tr>
<td>NRSG 25</td>
<td>Clinical Workshop 1</td>
<td>0.5</td>
</tr>
<tr>
<td>NRSG 26</td>
<td>Clinical Workshop 2</td>
<td>0.5</td>
</tr>
<tr>
<td>NRSG 213B</td>
<td>Major Drugs and Nursing Management II</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 171</td>
<td>Occupational Work Experience in Photography</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 220</td>
<td>Advanced Color Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 232</td>
<td>Approaches to Studio Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 252</td>
<td>Photography of the Landscape</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 120</td>
<td>Sedentary Activities for Students with Disabilities</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 121</td>
<td>Adapted Cardiovascular Exercise</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 122</td>
<td>Adapted Strength Training</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 123</td>
<td>Adapted Swimming</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 124</td>
<td>Wheelchair Activities</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 125</td>
<td>Water Safety Instructor (WS)</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 126</td>
<td>Lifeguard Training</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 130</td>
<td>Stretching and Relaxation</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 131</td>
<td>Walking for Fitness</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 132A</td>
<td>Low Impact Aerobics</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 132B</td>
<td>Aerobics Activities</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 133</td>
<td>Step Aerobics</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 134</td>
<td>Water Aerobics</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 135A</td>
<td>Circuit Weight Training Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 135B</td>
<td>Circuit Weight Training Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 136</td>
<td>Indoor Cycling</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 137</td>
<td>Song Unit</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 138</td>
<td>Yoga</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 139</td>
<td>Pilates Conditioning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 141</td>
<td>Fitness and Wellness</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 142</td>
<td>Fitness for Older Adults</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 143</td>
<td>Personal Fitness Program</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 145</td>
<td>Basic Training and Physical Conditioning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 146</td>
<td>Weight Management</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 147</td>
<td>Triathlon Basics</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 148</td>
<td>Body Sculpting</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 149A</td>
<td>Beginning Jogging</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 149B</td>
<td>Intermediate Jogging for Fitness</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 150A</td>
<td>Swimming, Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 150B</td>
<td>Swimming, Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 151</td>
<td>Wrestling, Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 153A</td>
<td>Backpacking, Beginning</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 153B</td>
<td>Backpacking, Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 154A</td>
<td>Badminton, Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 154B</td>
<td>Badminton, Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 155A</td>
<td>Bowling Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 155B</td>
<td>Bowling Intermediate/Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 156A</td>
<td>Golf, Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 156B</td>
<td>Golf: Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 158A</td>
<td>Racquetball, Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 158B</td>
<td>Racquetball, Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 159A</td>
<td>Tennis, Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 159B</td>
<td>Tennis, Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 160</td>
<td>Personal Self Defense</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 170</td>
<td>Water Polo</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 171A</td>
<td>Softball</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 171B</td>
<td>Softball, Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 171C</td>
<td>Slow Pitch Softball</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 172A</td>
<td>Volleyball, Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 172B</td>
<td>Volleyball, Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 173</td>
<td>Soccer Fitness and Technique</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 175A</td>
<td>Baseball, Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 175B</td>
<td>Baseball, Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 176A</td>
<td>Basketball</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 176B</td>
<td>Basketball, Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 177</td>
<td>Flag Football for Women &amp; Men</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 178</td>
<td>Football, Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 179A</td>
<td>Soccer, Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 179B</td>
<td>Soccer, Intermediate/Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 180</td>
<td>Introduction to Dance Movement</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 181</td>
<td>Introduction to Dance Cultures of the World</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 182A</td>
<td>Dance, Modern, Beginning</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 182B</td>
<td>Dance, Modern, Intermediate</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 183</td>
<td>Dance Production</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 184</td>
<td>Choreography</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 185</td>
<td>Partnering for Dance</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 186A</td>
<td>Beginning Ballet</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 186B</td>
<td>Intermediate Ballet</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 187</td>
<td>Dance Repertoire</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 188</td>
<td>Dance Performance</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 189</td>
<td>Dance Workshop</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 193</td>
<td>Introduction to Ballroom Dance</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 194</td>
<td>Ballet Variations</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 195</td>
<td>Commercial Dance</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 196</td>
<td>Latin Social Dance</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 200</td>
<td>Baseball</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 201</td>
<td>Baseball Off-Season Conditioning</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 202</td>
<td>Basketball, Men</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 204</td>
<td>Basketball, Women</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 206</td>
<td>Cross Country, Men</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 207</td>
<td>Cross Country Conditioning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 209</td>
<td>Cross Country, Women</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 210</td>
<td>Football, Men</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 211</td>
<td>Football Conditioning (Olympic Weights - Power Lifting)</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 212</td>
<td>Football Training and Techniques</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 213</td>
<td>Intercollegiate Golf</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 217</td>
<td>Soccer, Men</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 219</td>
<td>Soccer, Women</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 221</td>
<td>Softball, Women</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 222</td>
<td>Softball Pre-Season Conditioning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 223</td>
<td>Swimming</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 225</td>
<td>Swimming, Women</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 227</td>
<td>Tennis, Men</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 228</td>
<td>Tennis Conditioning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 229</td>
<td>Tennis, Women</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 231</td>
<td>Track &amp; Field, Men</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 233</td>
<td>Track &amp; Field, Women</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 234</td>
<td>Track &amp; Field Conditioning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 235</td>
<td>Volleyball, Women</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 236</td>
<td>Volleyball Pre-Season Conditioning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 238</td>
<td>Wrestling Off Season Training</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 239</td>
<td>Water Polo – Men</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 241</td>
<td>Water Polo – Women</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 243</td>
<td>Wrestling</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 245</td>
<td>Pep Unit</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 271A</td>
<td>Occupational Work Experience in Athletic Training</td>
<td>1.0</td>
</tr>
<tr>
<td>COURSE</td>
<td>DESCRIPTION</td>
<td>UNITS</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>-------</td>
</tr>
<tr>
<td>READ 6</td>
<td>Tutor Training</td>
<td>.5</td>
</tr>
<tr>
<td>RTV 155</td>
<td>Radio Production</td>
<td>3.0</td>
</tr>
<tr>
<td>RTV 171</td>
<td>Occupational Work Experience in Theatre</td>
<td>1.0</td>
</tr>
<tr>
<td>SLP 120L</td>
<td>Phonetics Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>SPCH 30</td>
<td>Communication Disorders</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 31</td>
<td>Communication Disorders</td>
<td>1.0</td>
</tr>
<tr>
<td>SPCH 200</td>
<td>Contemporary Communication Topics</td>
<td>3.0</td>
</tr>
<tr>
<td>SPCH 236</td>
<td>Beginning Forensics Workshop</td>
<td>1.0</td>
</tr>
<tr>
<td>SPCH 237</td>
<td>Intermediate Forensics Workshop</td>
<td>1.0</td>
</tr>
<tr>
<td>SPCH 238</td>
<td>Advanced Forensics Workshop</td>
<td>1.0</td>
</tr>
<tr>
<td>SPCH 239</td>
<td>Forensics Workshop</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 105</td>
<td>Intro to Musical Theatre Techniques</td>
<td>3.0</td>
</tr>
<tr>
<td>TH 109</td>
<td>Improvisation for the Theatre</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 115</td>
<td>Stage Movement &amp; Combat</td>
<td>3.0</td>
</tr>
<tr>
<td>TH 117</td>
<td>Stand-Up Comedy</td>
<td>3.0</td>
</tr>
<tr>
<td>TH 123</td>
<td>Stage Make-up</td>
<td>3.0</td>
</tr>
<tr>
<td>TH 130</td>
<td>Rehearsal &amp; Performance for the Minor Role</td>
<td>1.0</td>
</tr>
<tr>
<td>TH 131</td>
<td>Rehearsal &amp; Performance for the Supporting Role</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 132</td>
<td>Rehearsal and Performance for the Leading Roles</td>
<td>3.0</td>
</tr>
<tr>
<td>TH 133</td>
<td>Stage Crew Activity</td>
<td>1.0</td>
</tr>
<tr>
<td>TH 134</td>
<td>Technical Production</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 136</td>
<td>Touring Theatre Production for Supporting Roles</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 137</td>
<td>Touring Theatre Production for Leading Roles</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 140</td>
<td>Theatre Dance-Beginning Jazz</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 141</td>
<td>Theatre Dance-Intermediate Jazz</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 142</td>
<td>Theatre Dance-Beginning Tap</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 143</td>
<td>Theatre Dance-Intermediate Tap</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 145</td>
<td>Costume Production for Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>TH 146</td>
<td>Musical Theatre Production for Chorus</td>
<td>2.0</td>
</tr>
<tr>
<td>TH 147</td>
<td>Musical Theatre Production for Leading Roles</td>
<td>3.0</td>
</tr>
<tr>
<td>TH 156</td>
<td>Television Production</td>
<td>2.5</td>
</tr>
<tr>
<td>TH 160</td>
<td>Great Film Directors</td>
<td>3.0</td>
</tr>
<tr>
<td>TH 216</td>
<td>Acting for the Camera</td>
<td>3.0</td>
</tr>
<tr>
<td>TH 221</td>
<td>Costuming for the Stage</td>
<td>3.0</td>
</tr>
<tr>
<td>TH 241</td>
<td>Screenwriting</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 43/44</td>
<td>Welding Occ Work Experience</td>
<td>3-4</td>
</tr>
<tr>
<td>WELD 51L</td>
<td>Advanced Arc Welding Specialty Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>WELD 54L</td>
<td>Advanced Pipe Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 170</td>
<td>Structural Fabrication</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 210L</td>
<td>Arc Welding Applications</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 240</td>
<td>Advanced Tungsten Arc Welding Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 250L</td>
<td>Gas Tungsten Arc Welding Applications</td>
<td>2.0</td>
</tr>
<tr>
<td>WMT 43/44</td>
<td>Woodworking Manufacturing Tech Occ Work Experience</td>
<td>3-4</td>
</tr>
<tr>
<td>WMT 102</td>
<td>Introduction to Solid Wood Casegoods</td>
<td>4.0</td>
</tr>
<tr>
<td>WMT 103</td>
<td>Introduction to Tables</td>
<td>4.0</td>
</tr>
<tr>
<td>WMT 107</td>
<td>Wood Finishing</td>
<td>3.0</td>
</tr>
<tr>
<td>WMT 108</td>
<td>Wood Carving for Furniture</td>
<td>2.3</td>
</tr>
<tr>
<td>WMT 111L</td>
<td>Introduction to Woodworking Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>WMT 117</td>
<td>Woodworking and Architectural Environments</td>
<td>2.0</td>
</tr>
<tr>
<td>WMT 118</td>
<td>Introduction to Woodworking</td>
<td>2.0</td>
</tr>
<tr>
<td>WMT 119L</td>
<td>Introduction to Woodturning Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>WMT 130</td>
<td>Furniture Design</td>
<td>3.0</td>
</tr>
<tr>
<td>WMT 132</td>
<td>Chair Design and Construction</td>
<td>4.0</td>
</tr>
<tr>
<td>WMT 134</td>
<td>Frame Making</td>
<td>4.0</td>
</tr>
<tr>
<td>WMT 137</td>
<td>Outdoor Furniture</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**PROGRAM PLANNING**

Students are expected to take courses on a consecutive basis. Students are not to receive credit for courses which are considered lower in degree of advancement than those already taken. Courses are to be taken in accordance with the student's ultimate objective and major.

**CHANGE OF ADDRESS**

Changes in address must be reported immediately to the Office of Admissions and Records. Failure to do so may result in a delay of enrollment appointment or other important notifications. Address changes may be made online at www.cerritos.edu. “My Cerritos”, “My Portfolio.”

**COLLEGE UNITS**

Each college course is worth a certain number of “units”. This number is determined by the type of class it is and the number of hours per week it meets. For example, a three (3) unit lecture class (English or Health) meets three hours per week during a regular eighteen week semester, but a one (1) unit laboratory course meets three hours per week.
UNIT CREDIT FOR MILITARY SERVICE

Veterans who have served on active duty a period of one year or longer and who have received other than a dishonorable discharge may be granted four (4) units credit. The units will be designated as “Military Credit” on the transcript. To apply for these units the veteran must present the D.D. Form 214 to the Admissions and Records Office. Credits are elective credits for the A.A. Degree only and do not apply to certificate programs.

MILITARY WITHDRAWAL

Pursuant to Education Code 66023, the Board of Trustees of Cerritos College makes provisions for non-punitive withdrawals of students from class who are members of an active or reserve United States military service unit and who are compelled to withdraw from courses. Any such military orders must be verified. After such time, a student will be administratively dropped from all classes by the Dean of Academic Affairs. There will be no notation made for withdrawals. Military withdrawal shall not be counted in progress probation and dismissal calculations.

CLASSIFICATION OF STUDENTS

<table>
<thead>
<tr>
<th>Classification</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>One who has earned fewer than 30 units.</td>
</tr>
<tr>
<td>Sophomore</td>
<td>One who has earned 30 or more units but fewer than 60 units, or has completed 60 units but does not hold a degree</td>
</tr>
<tr>
<td>Graduate</td>
<td>One who has been awarded the Associate in Arts Degree or higher degree.</td>
</tr>
<tr>
<td>Full-time</td>
<td>One who is enrolled in 12 or more units.</td>
</tr>
<tr>
<td>Part-time</td>
<td>One who is enrolled in less than 12 units.</td>
</tr>
<tr>
<td>Special (Veysey)</td>
<td>One currently enrolled in the 11th or 12th grade in high school (may include summer session prior to 12th grade) and who desires to enroll for college credit. Such a student must have a letter of approval from either the high school principal or high school counselor and parental consent.</td>
</tr>
</tbody>
</table>

PARKING REGULATIONS

Parking on campus is by permit only. Any motorized vehicle (except mopeds and motorcycles) requiring registration with the California Department of Motor Vehicles must have a current parking permit each semester. On vehicles, PERMITS ARE TO BE HUNG FROM REAR VIEW MIRROR OR PLACED ON DASHBOARD. THE PERMIT NUMBER MUST BE READABLE FROM THE OUTSIDE OF THE VEHICLE. NO OTHER LOCATION IS ACCEPTABLE. Vehicles not properly displaying or having no permit will be cited. Vehicles must be parked only in spaces or areas designated for vehicle parking. All vehicles must be parked with the front of the vehicle heading into the parking stall. Students may not park in stalls designated for staff parking. A one-semester parking permit may be purchased at Registration, or anytime during the semester at the Admissions Office or Campus Police Department, for $20.00 for fall or spring semesters and $10.00 for the summer session. A daily permit may be obtained for a $1.00 from the yellow Park-Ur-Self meters located on the sidewalks in the student parking lots. The meters accept four quarters or a $1.00 bill (meter does not dispense change). Students may not park in staff parking lots or stalls unless they are disabled and have a “DP” plate or placard AND a student parking permit displayed. During the “open registration” period listed in the class schedule, parking is free in student stalls in lots C-1 and C-2. VEHICLES NOT DISPLAYING A VALID PERMIT OR INCORRECTLY PARKED IN STAFF, METERED, OR HANDICAPPED STALLS, ETC., WILL BE ISSUED A PARKING CITATION.

PARKING AREAS

Vehicles authorized to park on the Cerritos College campus shall be parked head in only in areas that have been painted with lines indicating parking stalls. Park only in the area designated by your permit except for handicapped students with DMV permit and Cerritos College permit.

Designated Parking Areas are Color Coded:

- **WHITE** ............... Student parking, student parking permit required.
- **YELLOW** .............. Faculty and staff, permit required.
- **GREEN** ............... Timed coin-operated meters.
- **BLUE** ................. Handicapped-DMV permit and Cerritos College permit required.
- **WHITE GRID MARKED** .... Motorcycle parking only.
- **PINK** ................. Cosmetology patron parking located in Lot C-11. Pink cosmetology patron parking permit required.
- **DARK BLUE** ........... Student Health Services

Bicycles must park in designated areas only. All designated student and staff parking areas will be enforced Monday through Friday, 7:30 a.m. to 10:00 p.m.

PARKING ON THE INTERIOR CAMPUS

Bicycles are to park in District provided racks. Violators will be cited. Only those vehicles with approval from college’s Campus Police Office are permitted to drive and park on the interior and sidewalks of the campus. Violators will be cited and/or the vehicle taken and put into storage.

OFF-CAMPUS PARKING

Off-campus parking is extremely restricted. Parking in surrounding residential areas is by City-issued permit only. The City will cite student vehicles. The property owners also prohibit parking in the shopping centers adjacent to campus. The property managers, at the student’s expense, impound student vehicles parking in these lots.

RESPONSIBILITIES FOR PENALTIES

The registered owner of any vehicle on campus may be held responsible for liability or damage claims including parking or other traffic violation penalties arising in connection with the possession and/or operation of the vehicles on the Cerritos College campus.

LOST, STOLEN, OR DAMAGED PERMITS

Replacements for lost, stolen, or damaged permits may be purchased at the Campus Police Department or Payroll Office in accordance with the fees indicated.

REFUNDS

Parking permit refunds will be given through the Payroll Office. Before classes begin, a 100 percent refund will be given. After classes begin, no refund will be given.

LIABILITY

Cerritos College is not responsible and assumes no liability for damage or theft of any vehicle or its contents.
Scholars’ Honors Program

The Scholars’ Honors Program (SHP) at Cerritos College provides transfer-bound students with the opportunity to enrich themselves through participation in unique, challenging and interactive educational experiences. The SHP promotes this goal by providing an office that supports and assists students, by offering special Honors course sections taught by outstanding professors, and by offering opportunities for students to work one-on-one and in class with these faculty members through honors research contracts.

Honors courses build skills in speaking, writing, analytical thinking, problem solving and task-management. They fulfill basic general education requirements for graduation and transfer to a four-year college or university.

ADVANTAGES OF HONORS

Honors programs in the community college are the least expensive and one of the most efficient ways to get a good education and prepare for admission to the 4-year university or college of your choice.

Major universities that reject most of those who apply as freshmen will often accept most of the community college honors program students who apply for junior year transfer.

The Scholars’ Honors Program at Cerritos is an effective way to develop your reading, writing, critical thinking and research skills and to learn to work directly with faculty members. This helps you to get good letters of recommendation that can be used for transferring to a four-year college or university, or applying for a job, internship or special program.

BENEFITS FOR SHP STUDENTS

- Working one-on-one with professors
- Small SHP course sizes
- Library privileges at UCLA and UCI
- Participation in regional and national honors conferences
- Guaranteed acceptance into several CSU honors programs offering priority registration
- Guaranteed admission or priority consideration for admission at:
  - UC Irvine
  - Chapman University
  - UCLA
  - La Sierra University
  - UC Riverside
  - UC Santa Cruz
  - Whitman College (WA)
  - And others

REQUIREMENTS OF THE PROGRAM

SHP students must maintain a cumulative GPA of at least 3.0 in all their transferable courses and complete a total of six honors courses from the two options below:

1. **SHP Courses** Many typical general education courses have honors sections. These have smaller enrollments than other courses. They offer different teaching approaches, more opportunity for hands-on experience and direct communication with the professors.

2. **SHP Contracts** Each semester the schedule of classes lists courses which are available for SHP contracts. Students undertaking a contract work closely with the instructor to design and complete a special honors project connected with the regular course. On completion of the project, the student earns honors credit for the course.

CRITERIA FOR ADMISSION TO THE SHP

- All students must demonstrate (through placements tests or other means) readiness to start English 100 (freshman composition)
- Accepted students must achieve eligibility for Math 80 (second year algebra) within one year.
- High School students must have a cumulative GPA of 3.25 or above.
- Current college students must have a cumulative GPA of 3.0 on at least 12 transferable units.

For applications or further information, contact:
Cerritos College
The Scholars’ Honors Program
(562) 860-2451, x2728  shp-info@cerritos.edu
On the Web: http://www.cerritos.edu/shp
Learning Communities Program

The Learning Communities Program (LCP) of Cerritos College is founded on the principle that acquiring knowledge demands social interaction. For this reason, the LCP seeks to nurture students within a community of learners and to engender a new culture of learning at Cerritos College. Specifically, the Learning Communities Program commits to three interdependent objectives. First, LCP validates that students’ experiences and ideas are essential components to true learning. Second, this program illustrates that collaboration and sharing increases exponentially the process of true teaching. Third, the Learning Community Program of Cerritos College demonstrates that an interdisciplinary approach to teaching and learning best prepares individuals for the complexities of living successfully in the 21st century.

WHAT IS A LEARNING COMMUNITY?

Enrolling in a Learning Community at Cerritos College means that you can complete your education program by linking two or more courses. Those who teach these courses assure that they combine the content so that learning becomes more relevant and easier for you. For example, you can be part of a learning community that combines English and history or math and economics. Equally important, by becoming part of the Learning Communities Program, you will have a great support network provided by your teachers, a counselor, and opportunities for various workshops and field trips. By combining learning, counseling, and social events, we want to increase your confidence and friendships. Each semester, the Learning Communities Program includes many linked or paired courses, courses that increase your fundamental skills and add to completion of your general education requirements. By registering for a Learning Community, you will be on the “Fast Track to Success.”

The First-Year Experience Program (FYE) is a special part of the Learning Community Program. Students are enrolled in a full semester’s work at one time. These courses are designed to provide students with a strong start in college. Students who are interested in this program should call (562) 860-2451, ext 2782 or 2814 for more information.

WHAT ARE THE BENEFITS OF JOINING A LEARNING COMMUNITY?

- Complete recommended basic skills courses
- Complete most of the transfer courses requirements
- Build a convenient class schedule
- Make friends in multiple classes with the same group of students
- Enjoy small group interaction
- Hear different points of view from more than one instructor
- Reinforce learning in one class while working on projects in the other
- Earn better grades

FREQUENTLY ASKED QUESTIONS

What is different about a Learning Community?

A Learning Community is a group of two or more classes where students and faculty address simultaneously the needs for greater intellectual interaction

STUDENT  ↔️  STUDENT
STUDENT  ↔️  FACULTY
FACULTY  ↔️  FACULTY

Are the Learning Communities courses transferable?

Many are transferable to the CSU and UC. See the schedule of classes or college catalog to check on specific courses.

What are the requirements to enroll?

You must enroll in all courses. The prerequisites are the same for each course separately. Check the Schedule of Classes.

Are Learning Community courses more difficult?

No, you will be required to do no more work than you would in two separate classes. In fact, by connecting courses, it may actually be easier to understand the material.

How will Learning Community course be listed on my transcript?

Your transcript will reflect the classes as separate courses.

HOW DO I REGISTER?

Log on to www.cerritos.edu, select MyCerritos, and follow the directions. Important, please note that all learning community courses are designed with a LC suffix. (for example ENGZL 100 LC) To enroll in a learning community, you must enroll in all courses in the learning community before exiting MyCerritos.

FALCON PHONE

Follow the step-by-step instruction in the schedule of classes. Do not forget to enroll in all the courses in the learning community before ending the call or you will not be registered in any learning community course. If you encounter problems registering, try reversing the order in which you enter the class number. If you encounter any other problem, please contact the Learning Communities Program Center immediately for assistance. For more information or assistance about enrolling in the Learning communities Program check the Internet at www.cerritos.edu/lcp or call (562) 860-2451, ext. 2782.

LEARNING COMMUNITIES PROGRAM WITHDRAWAL POLICY

Student enrolls in a group of two or more courses as part of a learning community, he or she MUST MEET THE PREREQUISITE(S), if there are any, for EACH course in the combination. Students enrolled in one section of a course that is part of a learning community must be enrolled in all other courses in that group. If one course is dropped, the student MUST and WILL BE DISENROLLED from all other courses in that learning community. THERE ARE NO EXCEPTIONS TO THIS POLICY.
Scholarship Regulations

FINAL EXAMINATIONS

Instructors at Cerritos College have established their course requirements within the framework of the College's philosophy and requirements.

Final examinations are required in all courses. A schedule for final examinations is posted two (2) weeks in advance of each semester's examination period. Students are expected to take examinations when scheduled; but in the event of an emergency or severe illness, the instructor should be notified.

GRADING

Accomplishment in course work is indicated by the following symbols:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Definition Grade</th>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Passing, less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>CR</td>
<td>Credit (at least satisfactory, the equivalent of a &quot;C&quot;); units awarded not counted in GPA</td>
<td>0</td>
</tr>
<tr>
<td>NC</td>
<td>No credit (less than satisfactory or failing - units not counted in GPA)</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>0</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>0</td>
</tr>
<tr>
<td>*RD</td>
<td>Report Delayed</td>
<td>0</td>
</tr>
</tbody>
</table>

*RD - The RD symbol is 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.

GRADE CHANGES

The determination of the student's grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetence. The correction of a grade given shall only be allowed for a request initiated within one year following the end of the term in which it was assigned.

Exceptions to the one-year limit on grade changes may be requested by petition of the student in extenuating circumstances. A formal petition must be submitted to the Academic Standards Committee. Extenuating circumstances are verified cases of accident, illnesses, or other circumstances beyond the control of the student. (Title 5, Section 55760, Board of Trustees Policy 12/8/1992).

INCOMPLETE

Students are not to re-enroll for a course in which a grade of “I” has been recorded. Incomplete academic work for unforeseeable, emergency and justifiable reasons at the end of the term may result in an “I” symbol being entered in the student's record. The condition for removal of the “I” shall be stated by instructor in a written record. This record shall contain the conditions for removal of the “I” and the grade assigned in lieu of its removal. This record must be given to the student with a copy on file with the Admissions and Records Office until the “I” is made up or the time limit has passed. A final grade shall be assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has passed. The “I” must be made up no later than one year following the end of the term in which it was assigned. The “I” symbol shall not be used in calculating units attempted nor for grade points.

WITHDRAWAL

Once students are enrolled it is their responsibility to attend class and complete the course requirements. Instructors may withdraw a student who is no longer participating due to excessive unexcused absences in the class. [Title 5, Section 58004 (C) (3)]. But, the ultimate responsibility to withdraw from a course in which they are no longer participating falls to the student.

Withdrawal from a class or classes shall be authorized through the last day of the 14th week of the semester (or 75% of a term, whichever is less). The academic record of a student who remains in a class beyond the date allowed for withdrawal must reflect a symbol authorized in Title 5, Section 55757, other than a “W”, “Ws” shall not be used in calculating grade point averages, but excessive “Ws” shall be used as factors for probation and dismissal procedures. A student who has a withdrawal (“W”) in the same course two or more times, loses the privilege of enrolling into that course. Students may petition the Academic Records and Standards Committee for exceptions to the Withdrawal Policy. Failure to withdraw may result in an “F” grade for each of the classes not dropped.

TRANSCRIPTS OF RECORD

A transcript of all college work completed at Cerritos College may be obtained by submitting a written request in the Office of Admissions and Records. Students requiring an official transcript that bears the college seal must file a written request. Students may obtain an unofficial copy of their transcript for their own personal reference via MyCerritos at www.cerritos.edu. The first two (2) transcripts (whether official or unofficial) are free. For subsequent copies, a fee of $2 is charged for each regular transcript; a $5 fee is charged for each rush transcript (copy needed sooner than three (3) days). The failure by a student to pay proper financial obligation due to the college or district may result in the withholding of grades, transcripts, diplomas, or registration privileges or any combination thereof. (Education Code, section 72237).

VERIFICATION OF STUDENT STATUS FEES

The following are the fees for verification of enrollment:
$2.00 per verification of status.
$7.00 additional rush fee per verification to be completed within 48 hours.
Exemptions for these fees are for verification of enrollment and grade point average for the California Student Aid Commission for financial aid purposes.

GOOD STANDING

Students are considered to be in good academic standing with a cumulative grade point average of 2.0 or higher for all course work attempted.

PROBATION

A. Academic Probation
Students who have completed at least twelve (12) semester units as shown by the official academic record shall be placed on academic probation if the students have earned a grade point average below 2.0 in all units undertaken at Cerritos College.

B. Progress Probation
Students who have enrolled in a total of at least twelve (12) semester units as shown by the official academic record shall be placed on progress probation when the percentage of all units at Cerritos College in which the students have enrolled and for which entries of “W”, “I” and “NC” are recorded reaches or exceeds 50 percent. Probation is entered on the student’s permanent records and transcripts of record. Students placed on academic or progress probation will be notified by mail at the address listed on the official college record.
PROBATION CLEARANCE

A. Academic Probation Clearance
Students may clear academic probation by earning sufficient grade points to raise the cumulative grade point average to 2.0 or higher in the next semester of attendance. Probation status is not cleared by one semester of 2.0 GPA if it does not raise the cumulative GPA to 2.0 or higher.

B. Progress Probation Clearance
Students may clear progress probation by decreasing the percentage of “W”, “I”, or “NC” entries to less than 50 percent of all units in which the students have enrolled.

STANDARDS FOR DISMISSAL

A. Academic Dismissal
Students are subject to academic dismissal when their GPA is less than 2.0 in 12 units or more for two consecutive semesters on academic probation. Students subject to academic dismissal shall be placed on continued probation when their latest semester's GPA is 2.0 or better.

B. Progress Dismissal
Students who have been placed on progress probation shall be subject to dismissal if the percentage of units in which the students have been enrolled and for which entries of “W”, “I”, or “NC” are recorded in at least two (2) consecutive semesters reaches or exceeds fifty percent. Students subject to progress dismissal shall be placed on continued probation when for their latest semester no “W”, “I”, or “NC” entries are recorded.

Students are notified they have been placed on probation shortly after the beginning of the subsequent semester. Dismissal notices are issued before the start of the Fall Semester. Dismissed students may attend Summer Session to improve academic deficiencies.

REINSTATEMENT AFTER DISMISSAL

A. Academic Reinstatement
Students may re-enter the semester following academic dismissal through successful petition to the Academic Records and Standards Committee. However, such students will remain on probation until the accumulated GPA is 2.0 or higher.

B. Progress Reinstatement
Students may re-enter the semester following progress dismissal through successful petition to the Academic Records and Standards Committee. However, such students will remain on probation until the percentage of “W”, “I”, or “NC” entries is less than 50 percent of all units in which the students have enrolled.

Petitions must be filed prior to the stated deadline for Fall registration.

DISMISSAL FROM CLASS OR COLLEGE

Excessive absences, unsatisfactory academic or progress achievement, undesirable citizenship, or falsification of information supplied to the Office of Admissions and Records shall serve as a basis for dismissal from a class or from the college.

ATTENDANCE

It is the responsibility of students to attend classes regularly and apply themselves to the college studies in which they are enrolled. When students have been absent due to illness, they should report to the instructor in charge to explain the absence. When the hours of absence exceed one more than twice the number of class hours per week, the students are considered to be excessively absent and are subject to exclusion from class.

For summer school, a student is considered excessively absent and subject to exclusion from class when the hours of absence exceed ten percent (10%) of the total class hours.

Listed below are two types of absences which permit the making up of work missed, provided that the work is of such a nature that it can be made up.

1. AUTHORIZED ABSENCE: For an approved educational field trip or school activity.
2. EXCUSED ABSENCE: For illness, injury, or quarantine.
3. JURY DUTY: Serving on jury duty is a civic and expected responsibility. Typically, courts tend to be lenient with students who are pursuing their education. If, however, an active student is required to serve on jury duty, an arrangement must be worked out in such a way that the student, upon presentation of proper documentation will not be penalized with a substandard grade in a course. Should an impasse develop between a faculty member and student, a decision can be appealed to the Dean of Academic Affairs before the final grade is assigned.

NO CREDIT WILL BE GIVEN FOR A CLASS IN WHICH A STUDENT IS NOT OFFICIALLY ENROLLED.

Students must attend the first class meeting or their names may be removed from the roll to allow another student seeking admission on an availability card to enter. If a student is unable to attend the first class meeting, the instructor must be notified.

BASIC SKILLS COURSE LIMITATIONS

No more than a total of thirty (30) units from the pre-collegiate basic skills courses listed below are allowed:

- BCOM 46
- ENGL 15, 20, 22, 32
- MATH 20, 40, 42
- READ 41T, 42, 43, 44, 46

“Basic Skills course work” refers to pre-collegiate basic skills courses (i.e., courses in reading, writing, computation, learning skills, study skills) which are designated as non-degree applicable courses, the purpose of which is to prepare students for successful completion of associate in arts degrees, transfer, or certificate courses.

As students near this thirty (30) unit limit, they will be notified by the Dean of Academic Affairs and referred to a counselor for educational planning.

Students enrolled in one or more courses of English as a Second Language (ESL) or students identified as having a learning disability are exempt from the thirty (30) unit limitation. A student who has completed thirty (30) units of basic skills course work, shall be barred from registering in pre-collegiate basic skills classes and referred to other appropriate agencies to develop the skills necessary to enter college-level course work.
ACADEMIC RENEWAL REGULATIONS

An Academic Renewal procedure permits alleviation of previously recorded sub-standard ("D," "F," and "NC") academic performance which is not reflective of a student's present demonstrated ability and level of performance. The permanent academic record shall be annotated in such a manner that all work remains legible, ensuring a true and complete academic history.

1. A student may request that substandard course work attempted in up to two semesters be annotated and disregarded in the computation of the student's grade point average or requirements for a degree. Only those requested courses with substandard grades will be disregarded.

2. At least twenty-four (24) units of college work from an accredited institution with a grade point average of 2.0 must be completed. The twenty-four (24) units with the 2.0 ("C") grade point average must be completed after the semester(s) from which course work is to be alleviated.

3. A student may be granted academic renewal only once.

4. No alleviated course work shall apply toward degree requirements.

5. In the petition, the student must specify course(s) to be considered under the academic renewal policy as well as the term in which the course work was attempted.

6. Some senior-level institutions and, possibly, certain out-of-state community colleges do not honor academic renewal. It is the student's responsibility to insure that his/her transfer institution will approve of academic renewal from Cerritos College.

A student may petition for academic renewal at the Office of Admissions and Records.

GRADE REPORTS

Semester grade reports are available to students at the Admissions and Records Office and via MyCerritos at www.cerritos.edu approximately 3 weeks after the conclusion of the term.

CREDIT BY EXAMINATION

"Credit by Examination" may be granted for proficiency previously accomplished in other than an accredited institution, for experience, study, travel, or for formal service-connected courses essentially equivalent to a course for which credit is being requested. Credit attempted by this method shall be so marked on the student's permanent record on an A-F grading system.

Units and grade points earned shall be counted toward the Associate in Arts Degree.

Units earned by "Credit by Examination" are not considered as part of the student's official program and will not be used for reports to Social Security, Veterans Administration, or similar agencies. Non-resident students will not be required to pay a tuition fee.

Students shall petition for "Credit by Examination" through a counselor. Petitioner is to take signed petition to his/her counselor for approval. If counselor approves, the petition must be submitted to the appropriate Instructional Dean for approval. It is the student's responsibility to obtain such approval by the designated deadline. (Deadline dates may vary from department to department. Student should see counselor for deadline dates). Results are forwarded to the Instructional Dean and to the Office of Academic Affairs for approval, then to the Office of Admissions and Records for recording.

ELIGIBILITY GOVERNING "CREDIT BY EXAMINATION"

1. The student is currently enrolled at Cerritos College.

2. The student's overall GPA in all college units attempted at Cerritos College is 2.0 (This requirement is waived for new entering students.)

3. The course is approved for "Credit by Examination." (See Schedule of Classes for list of approved courses.)

4. Student has met prerequisite(s) for the course.

5. The student has not already received credit for a more advanced course which follows this course in sequence.

6. The student has not previously challenged this course.

7. The course is one for which high school or college credit has not been previously granted, unless there is a course articulation agreement between Cerritos College and an educational institution or agency.

A student may earn up to a maximum of 12 units through "Credit by Examination."

Those students planning to transfer to the University of Southern California should be advised that credit by exam grades are not accepted at USC.

CREDIT/NO-CREDIT COURSES

Title 5, California Administrative Code, permits the granting of credit toward a degree or certificate for courses completed on a credit/no-credit basis.

A. Non-Optional:

The courses are graded entirely on a Credit/No Credit basis. These courses are included in the Schedule of Classes. Units earned in such courses shall not be considered part of the 15 unit limit in the Optional Credit/No Credit policy.

B. Optional:

The option to enroll with the Credit/No Credit grading option is designed to encourage students to explore courses in which they might have an interest. Only those courses specifically listed by each department may be taken on this basis. Units thus earned may be counted toward the A.A. Degree, but will be disregarded in determining grade point average.

Courses with the Credit/No Credit grade option will be indicated on the student's permanent record as "CR" with units earned and no grade points or "NC" with no units earned and no grade points. Units attempted for which "NC" is recorded shall be considered in probation and dismissal procedures. The student is required to take all tests, complete all assignments, and shall be subject to withdrawal and attendance regulations. Standards of evaluation are identical for all students. The student shall petition for a Credit/No Credit grading option through the Admissions and Records Office. The Credit/No Credit grading option is available only within the first 30% of the course. Students wishing to change Credit/No Credit to a letter grade may do so only within the first 30% of courses. See the Schedule of Classes for details and deadlines.
ELIGIBILITY GOVERNING “CREDIT/NO-CREDIT COURSES”

1. The course must be on an approved list of credit/no-credit courses.

2. No more than fifteen (15) units of credit/no-credit courses may be completed at Cerritos College, nor may more than fifteen (15) units earned on a credit/no-credit basis be applied toward the Associate in Arts degree. Some courses are graded entirely on a credit/no-credit basis. These courses are indicated in the Schedule of Classes. Units earned in such courses shall not be considered as part of the 15 unit limit in the optional credit/no-credit policy.

3. The petition for Credit/No credit must be submitted within the first 30% of the course.

ACCEPTANCE OF TRANSFER COLLEGE CREDIT

A student who presents an official transcript of previous college or university work (other than non-degree applicable course work) in courses comparable to those of Cerritos College may receive credit towards the associate in arts degree from Cerritos College. Before credit can be granted, the course work must have been completed at a college or university that is a member of one of the six regional accrediting associations. Official transcripts must be on file with the Admissions and Records Office. Hand-delivered copies of transcripts are accepted provided they are received in a sealed envelope.

Transfer credit from institutions using the quarter system shall be evaluated as follows:

- The number of quarter units shall be multiplied by two and divided by three to arrive at the approximate number of semester units. (i.e., 4 quarter units equal approximately 3 semester units.)
- Cerritos College is authorized to enroll international students and welcomes applications from such persons. All records of any previous schooling (mark sheets, transcripts, diplomas, certificates, etc.) must be submitted as original documents. These records must show courses taken and grades earned, and must be translated into English if the original records are in another language. If a translation is supplied, it should be certified as accurate and correct by an appropriate public or school official, or sponsoring agency or government. The original record should also be included.

Prior to the application of credit towards the Associate in Arts degree (A.A.), the international transcript must be submitted to evaluation agencies acceptable to Cerritos College. The college may then choose to accept or not accept the agency’s recommendations to award credit towards the Associate in Arts degree.

Since the four-year universities maintain their own individual evaluation staffs, credit from foreign institutions towards the baccalaureate degree is subject to the universities’ review.

International students also refer to Admissions of International Education Requirements for the A.A. degree as follows:

- The petition for Credit/No credit must be submitted within the first 30% of the course.

Acceptance of Transfer College Credit

Students planning to use AP credits toward transfer requirements should consult the transfer institution regarding its policy. Policies differ at the various colleges and universities. Universities tend to grant credit for all College Board Advanced Placement Tests on which a student scores 3 or higher. The credit may be subject credit, graduation credit, or credit toward general education or breath requirements, as determined by evaluators at each campus. A Cerritos College counselor can help you with your inquiries.

*Also satisfies the Writing Proficiency Requirement for the A.A. degree
**Also satisfies the Mathematics Proficiency Requirement for the A.A. degree.

ADVANCED PLACEMENT EXAM CREDIT

Cerritos College will grant credit for College Board Advanced Placement Examinations. A score of 3, 4, or 5 is required in order to receive units toward the A.A. degree. The number of units earned through Advanced Placement Exams will be noted on the student’s transcript. Credit granted can be used to satisfy Cerritos College general education requirements for the A.A. degree as follows:

<table>
<thead>
<tr>
<th>AP Subject</th>
<th>Number of Units</th>
<th>Cerritos College A.A. G.E. Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art: History of Art</td>
<td>3 semester units</td>
<td>6 c. (1)</td>
</tr>
<tr>
<td>Art: Studio</td>
<td>3 semester units</td>
<td>Elective credit only</td>
</tr>
<tr>
<td>Biology</td>
<td>4 semester units</td>
<td>6 a. (2)</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5 semester units</td>
<td>6 a. (1)</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>3 semester units</td>
<td>6 d. (2)</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>3 semester units</td>
<td>6 d. (2)</td>
</tr>
<tr>
<td>Economics: Macroeconomics</td>
<td>3 semester units</td>
<td>6 b. (3)</td>
</tr>
<tr>
<td>Economics: Microeconomics</td>
<td>3 semester units</td>
<td>6 b. (3)</td>
</tr>
<tr>
<td>*English: English Language &amp; Composition</td>
<td>3 semester units</td>
<td>6 d. (1)</td>
</tr>
<tr>
<td>*English: English Literature &amp; Composition</td>
<td>6 semester units</td>
<td>6 d. (1) and 6 c. (2)</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>3 semester units</td>
<td>6 a. (2)</td>
</tr>
<tr>
<td>French: French Language</td>
<td>5 semester units</td>
<td>6 c. (2)</td>
</tr>
<tr>
<td>French: French Literature</td>
<td>5 semester units</td>
<td>6 c. (2)</td>
</tr>
<tr>
<td>German Language</td>
<td>5 semester units</td>
<td>6 c. (2)</td>
</tr>
<tr>
<td>Government and Politics: United States</td>
<td>3 semester units</td>
<td>6 b. (2)</td>
</tr>
<tr>
<td>Government and Politics: Comparative</td>
<td>3 semester units</td>
<td>6 b. (3)</td>
</tr>
<tr>
<td>History: European History</td>
<td>3 semester units</td>
<td>6 b. (3)</td>
</tr>
<tr>
<td>History: United States History</td>
<td>3 semester units</td>
<td>6 b. (1)</td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>3 semester units</td>
<td>6 c. (2)</td>
</tr>
<tr>
<td>Latin: Latin Literature</td>
<td>3 semester units</td>
<td>6 c. (2)</td>
</tr>
<tr>
<td>**Mathematics: Calculus AB</td>
<td>3 semester units</td>
<td>6 d. (2)</td>
</tr>
<tr>
<td>**Mathematics: Calculus BC</td>
<td>3 semester units</td>
<td>6 d. (2)</td>
</tr>
<tr>
<td>Music Theory</td>
<td>3 semester units</td>
<td>6 c. (1)</td>
</tr>
<tr>
<td>Physics B</td>
<td>5 semester units</td>
<td>6 a. (1)</td>
</tr>
<tr>
<td>Physics C (mechanics)</td>
<td>3 semester units</td>
<td>6 a. (1)</td>
</tr>
<tr>
<td>Physics C (electricity and magnetism)</td>
<td>3 semester units</td>
<td>6 a. (1)</td>
</tr>
<tr>
<td>Psychology</td>
<td>3 semester units</td>
<td>6 b. (3)</td>
</tr>
<tr>
<td>Spanish: Spanish Language</td>
<td>5 semester units</td>
<td>6 c. (2)</td>
</tr>
<tr>
<td>Spanish: Spanish Literature</td>
<td>5 semester units</td>
<td>6 c. (2)</td>
</tr>
<tr>
<td>**Statistics</td>
<td>3 semester units</td>
<td>6 d. (2)</td>
</tr>
</tbody>
</table>

*Also satisfies the Writing Proficiency Requirement for the A.A. degree
**Also satisfies the Mathematics Proficiency Requirement for the A.A. degree.
COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The College Entrance Examination Board (CEEB) offers General and Subject Examinations through the College Level Examination Program (CLEP). The General Examinations measure college-level achievement in five general areas and the material covered is comparable to general education courses at the college freshman and sophomore levels. You may satisfy a significant portion of your general education requirements towards the Associate in Arts degree through CLEP General Examinations. Cerritos College will grant a corresponding number of units of credit for each general examination on which a student scores 500 or higher.

The College Level Examination Program is designed to be a means through which recognition, academic credit, and placement may be given for less conventional forms of educational experience. Those who may have reached a college-level of education through home or correspondence study, on-the-job training, telecourses, military service or other means may take the CLEP examinations which are offered by the College Entrance Examination Board.

A residency of 12 units of satisfactory work must be completed at Cerritos College prior to granting of credit under this program. A maximum of 30 units of credit via CLEP may be credited toward the Associate in Arts degree.

Credit for CLEP exams is granted as follows:

<table>
<thead>
<tr>
<th>General Examination</th>
<th>Units</th>
<th>A.A. GE Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>*English Composition (with Essay)</td>
<td>6</td>
<td>5 d. (1)</td>
</tr>
<tr>
<td>**Mathematics</td>
<td>6</td>
<td>5 d. (2)</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>6</td>
<td>5 a.</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
<td>5 b. (3)</td>
</tr>
<tr>
<td>Humanities</td>
<td>6</td>
<td>5 c.</td>
</tr>
</tbody>
</table>

*Also satisfies the Writing Proficiency Requirement for the A.A. degree only if the English Composition with Essay is taken.

**Also satisfies the Mathematics Proficiency Requirement for the A.A. degree.

You may not use CLEP to improve a previous grade earned in a course. No credit may be earned by CLEP for any course in which the student has already received a grade.

CLEP credit posted to another institution's transcript is reevaluated based on Cerritos College's standards. Evaluations made and credit allowed by Cerritos College are subject to review and evaluations by any college or university to which the student may later transfer. CLEP credit granted at Cerritos College will not be used to certify general education requirements for transfer. The University of California will not accept CLEP for transfer credit.

Repeating a CLEP examination is governed by a six-month waiting period.

Credit for Subject Examinations may be granted by Cerritos College for scores of 50 or more. The units may be applied in an area of general education and/or the major at the discretion of the college. Requests for general education credit should be submitted to the Admissions and Records Office on a Petition to the Academic Records and Standards Committee. Requests for major credit should be discussed with a counselor.

ACADEMIC HONESTY/DISHONESTY POLICY

Your instructors are eager to help you succeed in your studies at Cerritos College. But success means more than just receiving a passing grade in a course. Success means that you have mastered the course content so that you may use that knowledge in the future, either to be successful on a job, or to continue on with your education in advanced classes.

Your success depends on a combination of the skill and knowledge of your instructors, and your own hard work. You will reach your future goals only if you gain new knowledge from every course you take. That knowledge becomes yours, and can be used by you, only if it is gained through your own personal efforts. Receiving a grade in a course, without acquiring the knowledge that goes with it, diminishes your chances for future success.

While in college, you are also shaping the principles which will guide you throughout the rest of your life. Ethical behavior and integrity are a vital part of those principles. A reputation for honesty says more about you, and is more highly prized, than simply your academic skills.

For that reason, academic honesty is taken very seriously by the Cerritos College faculty. The following guidelines have been prepared so that you will understand what is expected of you in maintaining academic honesty.

Academic Dishonesty is normally to be dealt with as an academic action by the instructor, reflected in the student's grade in the particular course, rather than through college disciplinary procedures.

No specific departmental, divisional or institutional procedures are established for academic dishonesty other than the normal process for review and appeal of an instructor's grading procedures.

Academic Dishonesty is defined as the act of obtaining or attempting to obtain credit for work by the use of any dishonest, deceptive or fraudulent means. Examples of academic dishonesty would include, but not be limited to the following:

- Copying, either in part or in whole, from another's test or examination;
- Discussion of answers or ideas relating to the answers, on examination or test when the instructor prohibits such discussion;
- Obtaining copies of an exam without the permission of the instructor;
- Using notes, “Cheat sheets,” or otherwise utilizing information or devices not considered appropriate under the prescribed test conditions;
- Altering a grade or interfering with the grading procedures in any course;
- Allowing someone other than the officially enrolled student to represent the same;
- Plagiarism, which is defined as the act of taking the ideas, words or specific substantive material of another and offering them as one's own without giving credit to the source.

The faculty member may take options to the extent that the faculty member considers the cheating or plagiarism to manifest the student's lack of scholarship or to reflect on the student's lack of academic performance in the course. One or more of the following actions are available to the faculty member who suspects a student has been cheating or plagiarizing:

1. Review-no action.
2. An oral reprimand with emphasis on counseling toward prevention of further occurrences.
3. A requirement that work be repeated.
4. A reduction of the grade earned on the specific work in question, including the possibility of no credit for the work.
5. A reduction of the course grade as a result of item 4 above, including the possibility of a failing grade for the course.
6. Referral to the Office of Judicial Affairs for further administrative action, such as suspension or expulsion.

Cerritos College General Catalog
**Student Services**

**ASSOCIATED STUDENTS**

The Associated Students of Cerritos College (ASCC) provides the governing body that finances, organizes, and directs many programs for the student population. It co-sponsors with the district such activities as touchtone registration, athletics, choir, band, forensics, drama, and student newspaper.

The ASCC student government includes legislative, executive, and judicial branches. Participation in these programs and other campus activities has been a significant part of many students’ college experience.

**STATEMENT OF STUDENT RIGHTS AND RESPONSIBILITIES**

**PREAMBLE**

The community college exists for the transmission of knowledge, the pursuit of truth, the development of students and the general well being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community students should be encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth and knowledge.

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus and in the larger community.

Students should exercise their freedom with responsibility so as not to endanger the rights, goals and beliefs of other students. Cerritos College should be open to all qualified students regardless of race, creed, national origin, disability or sex.

**CLASSROOM RIGHTS AND RESPONSIBILITIES**

The professor in the classroom and in conference should permit free discussion, inquiry and expression of thought by the student. Student performance should be evaluated solely on an academic basis, not on opinions or willingness to accept professors’ personal beliefs, or conduct unrelated to academic standards. Student should be free to take reasoned exception to the data or views offered in any course of study for which they are enrolled and for maintaining standards of academic performance established for each course in which they are enrolled.

The student has the right to have the course taught in a systematic, meaningful manner and of knowing at the beginning of the course those academic standards required of the student in the course. Administrative staff and faculty members should respect confidential information about students such as student views, beliefs and political associations, which is acquired in the course of their work. Transcripts of academic records should contain only information about academic status.

**ON THE CAMPUS RIGHTS AND RESPONSIBILITIES**

Students should be free to examine and discuss all questions of interest to them, and express opinions publicly and privately. They should be free to organize and join associations to promote their common interests. The membership, policies and actions of a student organization will be determined by vote of only those persons who hold bona fide membership in that college organization. Campus advisors shall advise organizations in the exercise of their rights and responsibilities.

Student organizations shall be required to submit a statement of purpose, criteria for membership, rules of procedures, a current list of officers and the advisor shall certify the list of verified members. Campus organizations should be open to all students.

Student and student organizations should be free to support causes by orderly means which do not disrupt the regular and essential operation of the college. Student organizations shall have the right to recommend, invite and to hear any person of their own choosing as long as such speakers and topics are in accordance with federal, state and local laws, and guarantee the safety of students and protection of public property. Guest speakers invited by students or student organizations should be subjected only to those policies, requirements, and regulations as established by the Board of Trustees in order to insure an appropriate and meaningful contribution to the academic community. It should be made clear to the academic community and the larger community that the public expressions of students, student organizations and guest speakers speak only for themselves.

As constituents of the academic community, students should be free, individually and collectively, to express their views on issues of institutional policy, instruction, the evaluation of professors as it pertains to their course content and on matters of general interest to the student body.

**IN THE LARGER COMMUNITY**

College students are both citizens and members of the academic community. As citizens, students should enjoy the same freedom of speech, peaceful assembly and right of petition that other citizens enjoy. As citizens they should be subject to civil law as others and may incur penalties prescribed by civil authorities when violating these laws. Only where the college’s interests as an academic community are distinct and clearly involved should the special authority of the college be asserted.

**STUDENT PUBLICATIONS**

Student publications and the student press perform the traditional roles of informing, entertaining and influencing. They are both instructional and informational, and as such should meet the highest academic and professional standards in serving the broad college community and should set forth as the primary goal of the student newspaper the coverage of news events, happenings and experiences on the college campus.

Associated Student Body, administrative and academic authorities, in consultation with students and advisors have the responsibility to define and clarify the role of student publications, and the standards to be used in their evaluation.

They must also assure that both academic freedom and editorial freedom are protected and exercised so that the integrity of the student publications program and the free press will not be compromised.

It is incumbent upon student editors and managers to act according to the highest ethics of responsible journalism. This corollary responsibility includes careful adherence to the laws of libel and good taste, and such considerations as the avoidance of indecency, undocumented allegations, attacks on personal integrity, and the techniques of harassment and innuendo and should allow adequate space for rebuttal and differing views in regard to articles in which there is some controversy.

Safeguards to assure freedom of the student press with responsibility should include freedom from censorship or arbitrary control of the press, and protection of editors and managers from arbitrary attack, suspension, or removal because of disapproval of editorial policy or content by any external influence.
STUDENT GRIEVANCE POLICY

In accordance with the Statement of Student Rights and Responsibilities, this policy describes the procedures by which a student(s) of Cerritos College may air his or her grievances as applied to and regarding academic, administrative, and instructional matters relating to students, and including, but not limited to, any grievance dealing with any certificated or management employee of Cerritos College.

A grievance shall herein be defined as any act depriving a student of any of the rights set forth in the statement of "Student Rights and Responsibility," or any State, Federal, or local codes. Grades and grading grievances are not covered by this policy. Student should refer to "Grades or Grading Grievance Policy."

GRIEVANCE PROCEDURE: STEP I - INFORMAL ACTION

A. The student (or group of students), who believe that an injustice has been done to him (them), shall first attempt to resolve the complaint by informal discussion with the employee(s) involved.

B. If the problem is not resolved in step I-A, an informal discussion should take place with the person at the lowest level of authority directly above the person(s) at which the complaint is directed, where authority exists to take corrective action.

C. If the grievant still believes the issue has not been resolved satisfactorily, they may obtain a student grievance form from the Office of Judicial Affairs. After completion of this form, specifying the time, place, nature of the complaint and remedy or correction requested, it should be submitted to the Coordinator of Judicial Affairs who will send a copy of the written statement to the ASCC Supreme Court Chief Justice and the Vice President of Academic Affairs. This statement must be submitted within 30 school days after the grievant has become aware of the act or condition on which the complaint is based. A school day is defined as any day Monday through Friday that all normal college business is conducted, both in the classroom and in the administrative offices. All weekend and college holidays are excluded.

D. The ASCC Supreme Court Chief Justice or designee shall attempt to resolve the problem through informal meeting and discussion among the pertinent parties while remaining neutral on all issues involved. This informal meeting and discussion will attempt to involve the levels of administration concerned with the problem and should be completed within ten (10) school days (a school day is defined as a day when classes are held). In the event the informal procedure fails, then the formal procedure would be implemented.

STEP II - FORMAL ACTION

A. PRELIMINARY

1. If the grievant does not believe the grievance has been resolved, then the grievant must request through the Chief Justice Step II—Formal Action. The Chief Justice upon receiving the request of the grievant shall call a meeting of the Student Grievance Hearing Committee. The Hearing Committee will be composed in the following manner:

(a) ASCC Chief Court Justice and two (2) Court Justices or designees. Vice President of Academic Affairs or administrative designee. Faculty Senate President or Senate designee. One (1) Faculty Senate member, chosen by the Faculty Senate.

2. The Chief Justice or designee shall serve as the Hearing Committee Chairman, but shall have no vote in committee decisions. The five voting members of the Hearing Committee shall be selected within the first six weeks of the school year.

3. The Vice President of Academic Affairs or administrative designee shall serve as Hearing Committee Executive Secretary. The Executive Secretary, a voting member of the committee, shall be responsible for keeping necessary records of committee hearings and assist the ASCC Chief Court Justice in the conduct of the hearing.

4. Grievance Committee members are to deal with all grievances in a confidential manner, except when both parties agree to a public hearing.

B. FORMAL HEARING

The Hearing Committee shall conduct its proceedings according to the following procedures:

1. The Hearing Committee must meet within ten (10) school days after informal action has been completed and grievant has requested formal hearing.

2. The Chairman must notify both parties involved within five (5) school days before the hearing along with the written complaint, a copy of Statement of Student Rights and Responsibilities, and copy of the Grievance Policy.

3. Four (4) members shall constitute a quorum by which business may proceed. The quorum must include at least one student member, one faculty member, and one administrative member.

4. Both parties shall have the right to present personal statements, testimony, evidence, and witnesses. Each party shall have the right to be present, to be accompanied by the person of his choice, and to question witnesses who are present.

5. The Hearing Committee shall discuss the charge, hear the testimony, examine the witnesses, and receive all available evidence to the charge.

6. The hearing shall be closed to the public unless otherwise agreed upon in writing by both parties.

7. The Hearing Committee shall make decisions in private. The Hearing Committee shall write up findings and decisions. Copies of findings and decisions, including majority and minority reports, are to be sent to each party and the College President. The Hearing Committee's decision shall be final unless appealed.

8. A recording of the proceedings shall be kept in a confidential file in the Office of Judicial Affairs and shall be available at all times to parties directly involved. All documents, communications, and records dealing with the processing of a grievance will be filed separately from the personnel files of the participants. After a period of four years, the grievance file shall be destroyed.

9. Reprisals of any kind will not be taken by the Board of Trustees or any of its agents against any party of interest or any other participant in the grievance procedure by reason of such participation.

10. Evidence and testimony given in each case presented shall not be the sole cause of initiating or filing further grievances.

11. If the grievant does not respond within the time limits defined herein, the grievance is considered terminated and no further action will be taken.

12. The number of working days indicated at each step herein should be considered a maximum and every effort must be made to expedite the process. Time limits may be extended by mutual consent in writing or by decision of the Hearing Committee.

13. The Hearing Committee should attempt to reach a decision
STEP II

1. The student will obtain grade/grievance forms from the Office of Judicial Affairs.

2. The student must return the grade grievance form to the Office of Judicial Affairs within thirty (30) school days after the completion of the course for which the grievance was filed. A school day is defined as any day Monday through Friday that all normal college business is conducted, both in the classroom and in the administrative offices. All weekend and college holidays are excluded.

3. The Coordinator of Judicial Affairs will meet with the student and review the grade grievance form. If the student wishes to pursue the grievance, the Coordinator of Judicial Affairs will sign and date the form.

4. The student will present a copy of the grievance to the Division Instructional Dean. The Instructional Dean may schedule a meeting of all concerned if appropriate. The Instructional Dean should schedule a meeting only if the form has the signature of the Coordinator of Judicial Affairs and is dated. The Division Instructional Dean shall make a recommendation to the parties within five (5) school days.

STEP III

If either party is dissatisfied with the recommendation of the Instructional Dean, he/she may appeal the matter to the Vice President of Academic Affairs or designee within ten (10) school days of each recommendation. The Vice President of Academic Affairs or designee shall call a meeting with the student, the ASCC Chief Court Justice, Division Instructional Dean, and if needed, the faculty member. The Vice President of Academic Affairs or designee shall make a recommendation to the parties within five (5) school days.

STEP IV

If either party is dissatisfied with the recommendation of the Vice President of Academic Affairs, he/she may appeal the matter to the President of the College within ten (10) school days of such recommendation. If a faculty member is dissatisfied with a recommendation and neither acts on it, nor appeals it, the Vice President of Academic Affairs will forward the matter to the President. The President will review the Recommendation Report and if needed, request persons involved in the grievance to meet.

The President shall make a recommendation within five (5) school days. If either party is dissatisfied with the recommendation of the President, an appeal of the President's recommendation may be submitted to the Board of Trustees by either party. The appeal must be submitted within ten (10) school days after the President's recommendation. The Board may review an appeal for two (2) consecutive Board meetings, and if needed, request persons involved in the grievance to appear before making a final determination of the matter at the college level.

STUDENT CONDUCT POLICY

INTRODUCTION

The California Education Code requires every community college governing board to adopt specific rules governing student behavior along with applicable penalties for violation of such rules.

Students enrolling in Cerritos College assume an obligation to abide by all college regulations.

DISCIPLINARY PROCEEDING

In all disciplinary actions the student should be informed of the nature of the charges against him/her, that he/she is given a fair opportunity to refute them, and that the institution not be arbitrary in its actions.
GROUNDS FOR DISCIPLINARY ACTION
A student may be disciplined for one or more of the following causes which must be District related. These categories of behavior are not intended to be an exhaustive list, but are examples of causes and are good and sufficient cause for disciplinary action.

1. The Use, Sale or Possession of Dangerous Drugs, as defined in the California Penal Code, on campus.
2. Forgery, alteration, or misuse of college documents, records, or identification.
3. Misrepresentation of oneself or of an organization to be an agent of the college.
4. Continued Disruption on or off college property of the college's educational process, administrative process or other college functions.
5. Abuse of Any Person on college owned or controlled property in the possession of, or owned by, a member of the college community.
6. Theft, of or willful damage to college property, or property in the possession of, or owned by, a member of the college community.
7. Violation of College Policies or campus regulations including campus regulations concerning the registration of student organizations, the use of college facilities, or the time, place, and manner of public expression.
8. Willful or Persistent Smoking in any area where smoking has been prohibited by lawful authority.
9. Disorderly Conduct or lewd, indecent, or obscene conduct or expression on college owned or controlled property or at college sponsored or supervised functions.
10. Possession or Use of Explosives, dangerous chemicals, or deadly weapons on college property or at a college function without prior authorization of the college president or designee.
11. Assault, Battery or any threat of force or violence upon a student or college personnel.
12. Abusive Behavior directed toward, or hazing of, a member of the college community.
13. Continual Willful Disobedience and/or persistent defiance of authority.
14. Sexual Assault Battery Acquaintance Rape. Physical abuse of a member of the college community.
15. Violation of college policies governing the use of student user accounts.
16. Any Other Cause not listed above which is identified as “Good Cause” by the Education Code.

DISCIPLINARY ACTIONS AND PROCEDURES

1. Official Reprimand - An admonishment or warning that becomes part of a student's file and is considered in the event of future violations.
   1. May be initiated by any faculty or college manager and sent in writing to the Office of Judicial Affairs.
   2. The Coordinator of Judicial Affairs shall determine if there exists good and sufficient reason to initiate disciplinary action and student should be notified of such actions.

2. Disciplinary Probation - Disciplinary action which may include exclusion of the individual from designated co-curricular activities of the college community.
   1. Shall be initiated by the Office of Judicial Affairs.
   2. The nature of the misconduct, dates, time and place, and length of probation shall be placed in writing. Written copies shall be sent to the student, and copies filed with the Office of Judicial Affairs.

3. Instructor Removal - Instructor may remove a student from his or her class when the student has interfered with the instructional process. Duration will be for the day of the removal and the next class meeting.
   1. The instructor or Instructional Dean shall immediately report the removal to the Office of Judicial Affairs for appropriate action such as official reprimand, suspension, or recommendation of expulsion.

4. Suspension - Is an action defined as exclusion from college for a specified period of time.
   1. Suspensions shall be initiated by the President or designee.
   2. The duration of the suspension from one or more classes shall be for a period of up to ten days of instruction, for the remainder of the school term, or from all classes and activities of the community college for one or more terms.
   3. There may be an immediate suspension when necessary to protect lives or property and to insure the maintenance of order pending a hearing within ten school days.

5. Expulsion - Is defined as the removal of a student from any and all classes of the college.
   1. Only the Governing Board of the college may expel students for "Good Cause" or when other means of correction fail to bring about proper conduct of a student.
   2. The duration of the expulsion may be indefinitely.
   3. The expulsion is noted in the permanent file of the student.
   4. Readmittance after expulsion requires Governing Board action.

HEARING PROCEDURES
According to the Education Code, the suspension or expulsion of a student shall be accompanied by a hearing.

1. A Hearing Board shall be responsible to the President for reviewing and making recommendation to the President.

2. Membership of the Hearing Board shall include the following:
   1. A Hearing Board - Two members of the instructional staff appointed by the Faculty Senate.
   2. Students - Two Court Justices appointed by the ASCC Chief Court Justice.
   3. Management - The Coordinator of Judicial Affairs or a member of the management staff of the college appointed by the President. The manager shall serve as the Chairperson of the Hearing Board, but will not vote except to break a tie.

4. Procedures For a Hearing-
   1. Written notice of a hearing shall be mailed or delivered to the student. A hearing must be held within ten (10) days of the suspension if the suspension is an immediate suspension. A school day is defined as any day Monday through Friday that all normal college business is conducted, both in the classroom and in the administrative offices. All weekend and college holidays are excluded.
   2. Notice shall include date and place of hearing, a statement of all charges, a copy of Governing Board policies pertaining to suspension and expulsion, opportunity of student to appear in person, or to employ and be accompanied by counsel, at their own expense, and the opportunity to present evidence, oral and documentary.
   3. Hearings shall be conducted in the manner consistent with the orderly conduct of the affairs of the college, which seems to the Hearing Board most conducive to the determination of the truth.
4. All hearings shall be tape recorded. Transcriptions and a transcript shall be available at all times to parties directly involved, at their own expense.
5. Immediately following the hearing, the Hearing Board shall submit the recommendation to the President. The President and/or Governing Board will make the final decision.
6. The decision of the President to suspend shall be given to the student in writing within a five (5) school day period; the decision of the Governing Board to impose expulsion shall be given to the student in writing within two regular Board meetings.

THE OFFICE OF JUDICIAL AFFAIRS
The Office of Judicial Affairs is responsible for student conduct and disciplinary procedures of the college. Inquiries should be directed to the Coordinator of Judicial Affairs, Mr. Patrick Callahan, in the Office of Student Activities or by calling (562) 860-2451, Ext. 2472.

TITLE IX POLICY
No person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any “...education program of activity which...” benefits from Federal financial assistance. (Title IX of the Education Amendments of 1972.)

It is the policy of the State of California to afford all persons, regardless of their sex, equal rights and opportunities in the educational institutions of the state. (Education Code sections 200-264.)

In compliance with Title IX, Cerritos College’s educational programs and activities are offered to the total Community without regard to sex. Questions regarding Title IX policies affecting the educational program should be directed to the Dean of Academic Affairs, Dr. Adolph Johnson, Jr., in the Office of Academic Affairs or by calling (562) 860-2451, Ext. 2228.

EQUAL OPPORTUNITY POLICY
Cerritos College believes in a close relationship among students, faculty, staff, and community. The District is strongly committed to achieving staff diversity and the principles of equal opportunity employment. The District encourages a diverse pool of applicants and does not discriminate on the basis of race, color, national origin, ancestry, sex, age, religion, marital status, disability, or sexual orientation in any of its policies, procedures or practices. In fact, the college encourages applications from all segments of qualified people. Questions concerning the application of the policy may be addressed to the Human Resources Office by calling (562) 860-2451, Ext. 2228.

SECTION 504/508 AMERICANS WITH DISABILITIES ACT POLICY
Cerritos College supports the idea that no person shall, on the basis of a physical or mental disability, be unlawfully subjected to discrimination under any program or activity offered under the control of the college. Any student, applicant for admission, employee or applicant for employment who believes he or she has been subject to a discriminatory action on the basis of a physical or mental disability may file a complaint through the following procedures. An individual may also file a complaint directly with the Office of Civil Rights.

COMPLAINT PROCEDURE
The complaining party should first discuss the complaint regarding discrimination due to a disability with the individual(s) involved or with the Cerritos College Section 504/508 ADA Coordinator. The 504/508 ADA Coordinator will contact all parties concerned and attempt to reach some resolution of the problem. If the complaint cannot be formally resolved within ten working days, the complaining party may then proceed to file a formal complaint. The informal complaint procedure is optional.

STUDENT ORGANIZATIONS
Students are encouraged to participate in campus organizations. Cerritos College offers a variety of campus clubs and organizations for every phase of campus life. They provide opportunities for students in social, service, curricular, and special interest programs.

The club program consists of approximately 60 clubs on campus. Every year new clubs are chartered as they are requested by students.

Every club on campus is a part of the Inter Club Council which meets regularly to discuss activities, projects and problems pertaining to its members.

Students with a 2.0 G.P.A. and currently enrolled may join a club. Information concerning clubs may be obtained in the Office of Student Activities.

The Associated Students also co-sponsors with the District such activities as Athletics, Choir, Band, Forensics, Drama, and Talon Marks.

ATHLETICS
Cerritos College is a member of the South Coast Conference. Cerritos men’s teams are represented in: Baseball, Basketball, Cross Country, Football, Golf, Soccer, Swimming, Tennis, Track & Field, Water Polo, and Wrestling.

Cerritos women’s teams are represented in: Basketball, Cross Country, Soccer, Softball, Swimming, Tennis, Track & Field, and Volleyball.

DISABLED STUDENT PROGRAMS AND SERVICES POLICY
Cerritos Community College District affirms its programs and activities are available to all qualified persons without regard to disability. The College is also subject to Sections 504 and 508 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act.

The primary objective of the Disabled Student Programs is accommodations for disabled students in campus programs and activities to the greatest extent feasible. The ability of each disabled student to function independently in the collegiate environment is the ultimate goal.

Inquiries regarding the Disabled Students Program or the District’s non-discrimination policy relative to Sections 504 and 508 should be directed to the Director of Disabled Student Programs and Services.

DISABLED STUDENT PROGRAMS AND SERVICES
Individuals with limitations due to a disability may receive support services and instruction from one or more of six programs at Cerritos. Those with mobility, visual, hearing, speech, psychological and other health impairments as well as learning and developmental disabilities are served. All students are provided with an initial interview, counseling and referral as needed through Central Intake and Services (C.I.S.).

Additional non-classroom related assistance for qualified students includes: registration, campus orientation, accommodated placement tests, elevator pass, parking, learning disability eligibility assessment, matriculation and support with disability management issues. Special instruction and services which are classroom related are provided through the Centers described below. For further information or an initial appointment contact C.I.S. at (562) 860-2451, Ext. 2333, or visit our website at http://www3.cerritos.edu/student_services/dsps/index.html.

RESOURCE CENTER: The Resource Center assists students with mobility, vision, psychological or other health limitations. The services available include: In-class aides, note taking assistance, tutoring referral, test-taking, disability management, textbooks on tape, liaison with instructors and other campus offices, community agency resource
Nurse practitioners, registered nurses, medical assistants, and clerical services is staffed by a group of professionals that include physicians, available to all faculty, staff and visitors at no cost. The Student Health Services is available to all faculty, staff and visitors at no cost. First aid and referrals are provided. Students must contact the Student Health Services at extension 2321 for assistance or visit our website at www.cerritos.edu/health or call (562) 860-2451, extension 2321. We invite you to visit our website at www.cerritos.edu/health or call (562) 860-2451, extension 2321. We are located on the southeast corner of campus and would like to extend an invitation for you to stop in and visit us anytime.

**INSTRUCTIONAL SUPPORT CENTER:** The Instructional Support Center primarily serves students who are learning disabled, developmentally delayed and those with acquired brain injuries. Services available include: pre-registration, disability management, textbooks on tape, liaison with instructors and other campus offices, tape recorder and calculator loan, liaison with Regional Center and other agencies. An Independent Mediation Lab providing specialized instruction in approaches to accommodate the limitations of a cognitive disability is also available. The ISC also houses the Assistive Training and Information Center and Alternate Media Production Center for those students in need of alternative text or adapted access to computers. Brailled and large print texts and instruction in screen reader programs such as JAWS and voice activation software such as Dragon Dictate are present at this location. Adapted equipment and software is also located throughout the campus.

**SPEECH, LANGUAGE, AND HEARING CENTER:** The Speech, Language and Hearing Center offers assistance to those individuals with communication difficulties due to speech, language or hearing impairments. Individual and small group instruction is provided to students having difficulty with articulation, voice, language, aphasia, hearing impairments, and stuttering. Interpreters, notetakers, referral to appropriate services and specialized instruction in the basic skills are also available for the hearing impaired.

**RANCHO LOS AMIGOS MEDICAL CENTER:** Patients of Rancho Los Amigos Medical Center in Downey may attend college courses at the facility. In addition to basic instruction in the skills of reading, writing and computation, instruction in multi-clerical skills is available. The sessions are held four days per week throughout the year and may be entered at any time. The satellite campus at Rancho is designed for students who are students of Rancho.

**ACCIDENT INSURANCE**

Accident insurance is provided by Cerritos College to registered students in the event of an accident or injury during college sponsored and supervised activities. It may assist in covering medical bills incurred by students and athletes. There are benefit limitations and some exclusions in the policy, so it is important to work with the Student Health Services Staff to insure optimum coverage. Students enrolled at Cerritos College, whose children are injured while using the officially designated childcare facility on campus, are covered by Accident Insurance. If you have any questions contact Student Health Services at (562) 860-2451, extension 2321.

**HEALTH INSURANCE**

Supplemental insurance is available on a voluntary basis for health and hospitalization coverage. Students must contact the Student Activities Office or Student Health Services for insurance information and application.

**HEALTH SERVICES**

Health services are available to all students currently enrolled at Cerritos College upon proof of enrollment. First aid and referrals are available to all faculty, staff and visitors at no cost. The Student Health Services is staffed by a group of professionals that include physicians, nurse practitioners, registered nurses, medical assistants, and clerical support. They are all dedicated to your health and wellness. The SHS is able to provide basic outpatient services for the diagnosis and treatment of acute and sub-acute illnesses and injuries. A brief overview of services includes urgent care, preventive care, women’s and men’s health care, as well as, psychological, chiropractic, and optometric services, and a variety of support services (pharmacy, laboratory, health education, etc.). Accident, International student, and supplemental insurances are also available through the SHS. We invite you to visit our website at www.cerritos.edu/health or call (562) 860-2451, extension 2321. We are located on the southeast corner of campus and would like to extend an invitation for you to stop in and visit us anytime.

**PSYCHOLOGICAL SERVICES**

Psychological services and crisis intervention are available to students experiencing emotional problems or concerns. These services are a benefit of your student health fee and are provided by specially trained mental health professionals. Please contact the Student Health Services at extension 2321 for assistance or visit our website at www.cerritos.edu/health.

**STUDENT I.D. CARD**

It is imperative that all students be in possession of their student identification card at all times while on the Cerritos College campus. This card is necessary for “buy-backs” in the College Bookstore and it is important to present when using the College Library and Student Health Center.

An I.D. card can be obtained from the Student I.D. Center which is located in the game room between the Food Court and the College Bookstore.

**Regular Hours**

- During fall and spring semesters: 9:00 a.m. to 7:00 p.m., Monday through Thursday.
- During summer sessions: 9:00 a.m. to 1:00 p.m., Monday through Thursday during the first week of each session. Special extended hours will be posted during these periods.

**Extended Hours**

- During fall and spring walk-in registration, 9:00 a.m. to 7:00 p.m., Monday through Thursday and from 9:00 a.m. to 4:00 p.m. on Friday. If a student has special circumstances and cannot be available to obtain the identification card during any of the hours listed above, arrangements can be made by calling (562) 860-2451, ext. 2480.

**COLLEGE BOOKSTORE**

The Cerritos College Bookstore is maintained by the Follett Higher Education Group in association with the ASCC. The store carries required materials, new and used textbooks, reference materials, school supplies, snacks, imprinted gifts and clothing. MasterCard, Visa, American Express, and Discover are accepted. Fall and spring semester regular hours are: 7:30 a.m. – 7:00 p.m., Monday through Thursday; 7:30 a.m. – 2:00 p.m., Friday; closed on Saturday and Sunday. Special store hours are in effect during the beginning of classes, graduation, and other special events. Please call the Bookstore at (562) 860-2451, Ext. 2462, for more information.

**USED BOOK BUYBACK AT THE BOOKSTORE**

The bookstore arranges several formal buybacks during the school year, but will buy back a book anytime throughout the year. The Bookstore shall purchase used textbooks adopted for the next academic term in quantities sufficient to meet course requirements at up to 50% of the purchase price. The Bookstore shall purchase books not adopted for the next academic term or in excess of course requirements as published national market value.
The Bookstore will accept returns in accordance with the following policies:

1. Non-textbook items may be refunded or exchanged within 48 hours with original receipt.
2. Textbooks in resalable condition may be refunded with receipt within seven (7) calendar days from the start of classes or within two (2) days of purchase thereafter.
3. Textbooks purchased during the last week of classes or during exams may be sold back under the book buyback policy.
4. In addition, upon proof of drop/add, the Bookstore will accept textbook returns from students who have dropped a course up to thirty (30) days from the start of classes or until the end of the official drop/add period, whichever comes first.

**BOOKSTORE REFUND POLICY**

1. Non-textbook items may be refunded or exchanged within 48 hours with the original receipt, providing the merchandise is in resalable condition.
2. Textbooks may be refunded with receipt within seven (7) calendar days from the start of classes or within two (2) days of purchase thereafter.
3. During the summer term, textbook refunds with a receipt will be given within seven (7) calendar days from the start of classes or within two (2) days of purchase thereafter.
4. Textbooks purchased during the last week of classes or during exams may be sold back under the book buyback policy.
5. In addition, upon proof of drop/add, the Bookstore will accept course material returns (textbooks) from students who have dropped a course up to thirty (30) days from the first day of classes or until the end of the official campus drop/add period, whichever comes first.

Bookstore managers may lengthen refund time periods or allow exceptions to any of the above if circumstances warrant.

**FOOD SERVICES**

A food court and cafeteria are located in the Student Center. The food court is open Monday through Friday from 7:20 a.m. to 7:00 p.m.; and Friday, 8:00 A.M. to 4:00 P.M. Call (562) 860-2451, Ext. 2356 for more information.

A food court and cafeteria are located in the Student Center. The food court is open Monday through Friday from 7:20 a.m. to 7:00 p.m.; and Friday, 8:00 A.M. to 4:00 P.M. Call (562) 860-2451, Ext. 2356 for more information.

**CAREER SERVICES CENTER**

**Job Placement-Student Employment Office**

Cerritos students and alumni who are looking for employment may apply at the Job Placement desk, located in the Career Services Center. Employment opportunities from many local businesses, industrial and governmental agencies are available on the web and in binders on the Job Placement counter.

Full and part-time jobs are available, as well as student internship positions. Employment listings may be viewed at the Career Services Center or through the Internet at http://www.monstertrak.com

Job Placement Services is open Monday through Thursday, 8:00 A.M. to 7:00 P.M.; and Friday, 8:00 A.M. to 4:00 P.M. For more information call (562) 860-2451, Ext. 2366, “e-mail” jobplacement-info@cerritos.edu, or visit us at http://www.cerritos.edu/career-services/job-placement

**Career Center**

As part of our commitment to student success, the Career Center will assist students who are undecided about their majors and/or their vocational goals. Comprehensive career counseling and information resources are available to aid in that process. The Career Center is located in the Administration Building and is open Monday through Thursday, 8:00 A.M. to 7:00 P.M.; and Friday, 8:00 A.M. to 4:00 P.M. Call (562) 860-2451, Ext. 2356 for more information.

**Re-entry Resource Program**

The Re-entry Resource Program assists adults returning to school make a smooth transition, overcome barriers unique to returning adults, and successfully attain their college goals and objectives.

Services include personal assistance, orientations, workshops based on re-entry student issues, support groups, and information regarding child care, financial aid, career counseling, job placement and community resources. Re-entry students of varied ages find these services relevant to their needs and interests.

The Re-entry Resource Program is located in the Career Services Center and is open Monday through Thursday, 8:00 A.M. to 7:00 P.M.; and Friday, 8:00 A.M. to 4:00 P.M. Call (562) 860-2451, Ext. 2362 for more information.

**CalWORKs**

The CalWORKs program at Cerritos College exists to assist students who are receiving Temporary Assistance for Needy Families (TANF). The program provides counseling and educational planning, referrals to campus and community-based organizations, up-to-date information regarding Welfare Reform rules and their impact on students, job search assistance, childcare agency referrals, and post employment services. For eligible students, the CalWORKs program also provides payment for childcare during class and work hours. For more information about the CalWORKs program, or to find out if you are eligible for paid childcare, please call (562) 860-2451, Ext. 2356 and make an appointment with a CalWORKs counselor.

**INTRAMURALS**

An active intramural program is provided for Cerritos students and all students are encouraged to make use of the extensive sports facilities on campus.

**TRANSFER CENTER**

The Transfer Center is designed to increase the transfer rate of Cerritos College students to four-year colleges and universities. The Transfer Center has been charged with helping to increase the transfer rate of underrepresented students. The Transfer Center provides information on transfer programs, general education requirements, advising, and personal contact with representatives from colleges and universities. The Transfer Center is located in Career Services in the Administration Building and office hours are 8:30 A.M. to 6:00 P.M., Monday through Thursday, and 8:30 A.M. to 4:00 P.M. on Friday. Call (562) 860-2451, Ext. 2154, for further information.

**CHILD DEVELOPMENT CENTER**

A Nationally Accredited, State Licensed Child Development Center is available for children, ages 2 years, 9 months through Kindergarten. Its purpose is to provide an educational program which helps the individual child grow to his/her fullest potential. The Center focuses on developmentally appropriate activities to foster respect for cultural diversity by providing multicultural, anti-bias, and non-sexist activities in curriculum. The program features Sensory Development, Language Arts, Math, Science, Dramatic Play, Art, Music, Fine & Gross Motor Development, and Social Studies. Registration for the Center takes place each semester on a first-come, first-served basis considering space for each child and families are encouraged to apply early.
Included in this area are graphic arts services, an audio-video production, instructional support for the entire campus as well as satellite locations. Printers are also available in the labs for student use. Libraries are also available in the library and two computer labs. Research guides on topics related to the Cerritos College curriculum are available. High-demand materials for limited periods of time. A wide range of library faculty as integral to the Cerritos College instructional program. All library materials are carefully selected by classroom faculty and catalog provides access to books, periodicals, journals, and web resources. Newspapers are available in an open stack arrangement. The online catalog allows access to books, periodicals, journals, and web resources. All library materials are carefully selected by classroom faculty and library faculty as part of the Cerritos College instructional program. The Reserve Book Area, at the circulation desk, permits students to check out high-demand materials for limited periods of time. A wide range of research guides on topics related to the Cerritos College curriculum are available in print and on the web. The Library provides typewriters for patron use. Computers available for student use are also available in the library and two computer labs. Printers are also available in the labs. Instructional Media Services, also located on the lower level, provides instructional support for the entire campus as well as satellite locations. Included in this area are graphic arts services, an audio-video production studio, a film booking and video tape center, facilities for maintenance and repair of audio-visual equipment, and an equipment booking and delivery center. Instructional Media also maintains and supervises several video and closed circuit video systems on the campus. The Computer Assisted Labs (LC 137) located on the lower level of the LRC, houses several hundred audio and videotapes and other media materials for students use. All areas of the Library and Learning Resources Center are staffed with qualified personnel eager to help you. The library is open during the regular school year Monday through Thursday, 7:30 a.m. to 10 p.m., Friday, 7:30 a.m. to 3:00 p.m. The Library is also open 9 a.m. to 3 p.m. on Saturday.

**FOSTER AND KINSHIP CARE EDUCATION PROGRAMS**

Foster and Kinship Care Education programs provide foster parents and relative caregivers with educational workshops to enhance and develop parenting skills related to caring for the children in their care. Emancipating foster youth also have the opportunity to take classes to learn independent living skills.

There are four programs under the Foster and Kinship Care Education umbrella: 1) The Model Approach to Partnership in Parenting (MAPP) is a 36-hour training conducted for prospective foster parents, as is required by the Department of Child and Family Services (DCFS), 2) Foster & Kinship Care Renewal Courses, which give foster parents the opportunity to take topical courses, which are required in order to keep the foster parent license, 3) Kinship Education, Preparation and Support (KEPS) is designed to help care providers who are raising a relative’s child. This training is required of all Kinship providers who are working with the Department of Family and Social Services, but is open to all kinship providers in the community, and 4) Independent Living Skills Program (ILP), is offered to 16-18 year-olds to teach basic living skills. This gives the teenagers the chance to learn the knowledge and skills that they will need in order to live on their own once they leave the foster care system.

All of the classes are free to participants. Classes are mainly held on site in Research and Development, Room Nine. Foster Care renewal courses are also held at Faith Church in Norwalk. To obtain more information or to register for classes, please contact 562-860-2451 ext. 2548.

**LIBRARY AND LEARNING RESOURCE CENTER**

The Cerritos College Library and Learning Resource Center (LRC), located near the center of the campus, provides a wide range of materials and services. Both students and district residents are invited to use the Center and apply for a library card. Disabled students have easy access throughout the building via ramps and elevators.

Patrons enjoy access to over 100,000 books, 300 magazine and newspaper subscriptions in an open stack arrangement. The online catalog allows access to books, periodicals, journals, and web resources. All library materials are carefully selected by classroom faculty and library faculty as integral to the Cerritos College instructional program. The Reserve Book Area, at the circulation desk, permits students to check out high-demand materials for limited periods of time. A wide range of research guides on topics related to the Cerritos College curriculum are available in print and on the web.

The Library provides typewriters for patron use. Computers available for student use are also available in the library and two computer labs. Printers are also available in the labs. Instructional Media Services, also located on the lower level, provides instructional support for the entire campus as well as satellite locations. Included in this area are graphic arts services, an audio-video production studio, a film booking and video tape center, facilities for maintenance and repair of audio-visual equipment, and an equipment booking and delivery center. Instructional Media also maintains and supervises several video and closed circuit video systems on the campus.

The Computer Assisted Labs (LC 137) located on the lower level of the LRC, houses several hundred audio and videotapes and other media materials for students use.

All areas of the Library and Learning Resources Center are staffed with qualified personnel eager to help you. The library is open during the regular school year Monday through Thursday, 7:30 a.m. to 10 p.m., Friday, 7:30 a.m. to 3:00 p.m. The Library is also open 9 a.m. to 3 p.m. on Saturday.

**ACADEMIC SUPPORT CENTER**

The Academic Support Center (formerly the Learning Assistance Program) has been established to serve the needs of faculty and students across the campus. ASC has set out to provide academic support for all levels of students. This is being done by offering tutoring in virtually any subject; by working with instructors to enhance course offerings, including involving instructors with supplemental instruction; by offering a variety of educational measurements to determine specific needs of students; by providing skills-specific workshops designed to help student succeed in their classes; and by providing a wide range of web-based assistance that can help students and instructors.

All services are free to Cerritos College students. The Academic Support Center is located on the lower level of the Learning Resource Center. Call (562) 860-2451, Ext. 2407 for additional information.

**DIRECTORY INFORMATION**

Cerritos College will not release personally identifiable data about students without their prior written consent except to persons and agencies authorized by law. The College may make an exception to this, in response to legitimate inquiries, by providing general directory information to include: Name, Date and Place of Birth, Major Field of Study, Class Level, Dates of Attendance, Degrees and Awards Received, Previous Educational Institutions Attended, Participation in Officially Recognized Activities and Sports, Weight and Height of Members of Athletic Teams.

**CONSENT**

Cerritos College may permit access to student records to any person for whom the student has executed written consent specifying the records to be released and identifying the party or parties to whom the records may be released. Such consent must be signed and dated by the student. The recipient must be notified that the transmission of the information to others is prohibited. Title 5 (California Administrative Regulations) Section 54616.

**SEXUAL ASSAULT AND ACQUAINTANCE RAPE POLICY**

Cerritos College is committed to providing a safe and secure environment for all members of the campus community. The Sexual Assault and Acquaintance Rape policy is in accordance with Assembly Bill 3098 and Section 201, Public Law 101-342 as amended by Public Law 102-26. Sexual assault and acquaintance rape are crimes and will be treated as such. Students and employees who become victims of sexual assault or acquaintance rape are encouraged to report the crime immediately to the Campus Police. The college is dedicated to providing prompt and compassionate services to all crime victims. In the event of a sexual assault on campus, the chief of Campus Police will notify the President/Superintendent.

**SEXUAL HARASSMENT**

It is the policy of the Cerritos Community College District to provide an educational, employment, and business environment free of unwelcome sexual advances, requests or offers for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment, as defined and otherwise prohibited by federal and state statutes.

The President/Superintendent shall provide regulations and procedures for implementation of this policy and such regulations and
procedures shall be included as a part of the District’s Affirmative Action/Staff Diversity Program.

It shall be a violation of this policy for anyone who is authorized to recommend or take personnel or academic actions affecting an employee or student, or who is otherwise authorized to transact business or perform other acts or services on behalf of the Cerritos Community College District, to engage in sexual harassment as defined below.

Sexual harassment occurs when unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature takes place and:

1. Is made explicitly or implicitly a term or condition of an individual’s educational status or employment; or
2. Is used as a basis for educational or employment decisions affecting such individual; or
3. Has the purpose or effect of unreasonably interfering with an individual’s work performance or creating an intimidating, hostile, or offensive educational or working environment; or
4. Is used as the basis for any decision affecting the individual regarding benefits and services, honors, programs, or activities available at or through the District.

For the purpose of further clarification, sexual harassment includes but is not limited to:

1. Making written, verbal, physical and/or visual contact with sexual overtones:
   a. written examples include but are not limited to suggestive or obscene letters, notes, or invitations.
   b. verbal examples include but are not limited to derogatory comments, slurs, jokes, epithets and/or promulgating sexual rumors.
   c. physical examples include but are not limited to assault, touching, impeding or blocking movement.
   d. visual examples include but are not limited to leering, gestures, or display of sexually suggestive objects, pictures, cartoons or posters.

2. Continuing to express sexual interest after being informed that the interest is unwelcome. (Reciprocal attraction is not considered sexual harassment.)

3. Making reprisals, threats of reprisals, or implied threats of reprisals following a negative response. For example:
   a. within the work environment - either implying or actually withholding support for an appointment, promotion, or change of assignment, suggesting a poor performance report will be prepared, or suggesting probation will be failed.
   b. within the educational environment - either implying or actually withholding grades earned or deserved, suggesting a poor performance evaluation will be prepared, or suggesting a scholarship recommendation or college application will be denied.

4. Within the work environment, engaging in implicit or explicit coercive sexual behavior which is used to control, influence, or affect the career, salary, and/or work environment of another employee. Within the educational environment, engaging in implicit or explicit coercive sexual behavior which is used to control, influence, or affect the educational opportunities, grades, and/or learning environment of a student.

5. Offering favors or educational or employment benefits, such as grades or promotions, favorable performance evaluations, favorable assignments, favorable duties or shifts, recommendations, reclassifications, etc. in exchange for sexual favors.

It shall also be a violation of this policy for any employee to sexually harass another employee.

Formal complaints under this policy shall be processed through the District’s Investigation and Resolution of Complaints of Unlawful Discrimination procedure through the Manager of Employment Services/Faculty and Staff Diversity Officer and the President/Superintendent.
Honors and Awards

HONOR GRADUATES

The honor graduates are identified by the silver tassel they wear on their cap. Graduates who achieved a 3.3 to 3.69 grade point average will graduate “With Honors.” Those receiving a 3.70 to 4.0 will graduate “With Highest Honors.”

Only units earned at Cerritos College may be used in computing the grade point average for honor graduates. To be considered for honor status a minimum of 24 units must be earned at Cerritos College. If you are a Spring or Summer graduate, your honors for Commencement are based on your GPA up to and including the previous Fall semester.

DEAN’S LIST

Full-time students with 12 units earned or more of college-level courses in a single semester and who achieve a 3.5 grade point average or higher within those units earned will qualify for the Dean’s List.

ACADEMIC EXCELLENCE AWARDS

The Cerritos College Foundation annually sponsors an awards program for those students selected for outstanding academic achievement from the various subject matter areas on campus.

Academic honors are awarded to students who do outstanding work in their major field of study. Students must show promise, possess a current Associated Student Body card, have above average grades, and be recommended by the instructors in their major field.

RETENTION AWARDS PROGRAM

The Retention Awards Program recognizes students who have successfully completed a semester of course work at Cerritos College. Successful completion is based on: Receiving no “W” grades in any course, earning a “C” or better in each CREDIT course of at least 3 units, enrolled in at least one pre-collegiate basic skills course (as defined by Title 5), and enrolled in a minimum of nine semester units.

Students meeting the aforementioned criteria qualify for a congratulatory letter from the Vice President of Academic Affairs/Provost, the Vice President of Student Services/Assistant Superintendent, and the Retention Awards Program Coordinator.

"The Associated Students offers a number of honors and awards to students for outstanding leadership, service, and academic achievements."

SERVICE AND LEADERSHIP AWARDS

The Gold and Silver Falcons are the highest and most prestigious awards that are given to students for service, leadership and scholarship each semester.

Bronze Falcons are awarded to students who excel in leadership and participation in programs sponsored by the Associated Students of Cerritos College.

Service Certificates are awarded in recognition of service and participation in programs sponsored by the Associated Students of Cerritos College.

CLUB/ORGANIZATION AWARDS

Club and organizations are recognized and honored for their service and participation in various programs. The Associated Students also recognizes and rewards various activity groups on campus, such as Intercollegiate Athletics, Band, Forensics, Talon Marks, Theatre, Choir, Pep Squad, and Honor Society.

ATHLETIC AWARDS

The Associated Students of Cerritos College has an excellent athletic awards system for all intercollegiate athletics. This recognition is in the form of banquets, letters, certificates, key chains, plaques, and lifetime passes.
Student Financial Aid

Cerritos College administers comprehensive student financial aid programs to assist students in meeting college costs. The amount of financial aid awarded varies from student to student, depending on the individual's need and resources.

Financial aid awards are based on calculated financial need as determined by the Free Application for Federal Student Aid (FAFSA).

The Financial Aid Office is part of the Student Affairs department and is located in the Administration building. Office hours are Monday and Tuesday, 10 a.m. – 2 p.m., Wednesday and Thursday, 10 a.m. – 6:30 p.m., and Friday, from 9:00 a.m. – 12 noon.

Financial aid applications are available year round. The Cerritos College Student Financial Aid Title IV Institutional Code is 00161. Students applying for Federal financial aid must have a high school diploma, GED, or pass the “Ability to Benefit” test.

When applying for financial aid, students must be required to submit official academic transcripts from ALL colleges/universities attended. These transcripts will be forwarded to the Office of Admissions and Records. Without this information, a delay may occur in the completion of a student's file, or be cause to close a student's file.

The Financial Aid Office will pay for units enrolled up to 70 units. Once a student reaches the 70 unit level, a student is no longer eligible for financial aid. However, a student may appeal and submit a “lock-in-list” to the Financial Aid Advisory Committee (FAAC). If the “lock-in-list” is approved, Financial Aid will only pay for courses on that list. Again, it is important to have ALL academic transcripts sent to the college and evaluated as soon as possible because it may affect a student's financial aid eligibility.

It is suggested that students take the Assessment Test, complete the financial aid supplemental forms, and schedule an appointment with an academic counselor to prepare a pre-plan each semester. Students must also enroll in courses recommended by their counselor, which lead to a certificate, associate degree, or transfer major. A 2.0 cumulative grade point average must be maintained for all college work to be eligible for financial aid. Students must also complete 75% of all courses enrolled. All students on financial aid are given a satisfactory academic standards booklet. It is the students' responsibility to read and understand information in the Financial Aid Satisfactory Academic Progress (SAP) Standard booklet.

Since the application process is a lengthy one, students should plan ahead to have sufficient funds to cover fees, books, and supplies. Pell Grant checks are mailed two times a semester to students. Disbursements will take place (approximately) in the fourth and fifteenth week of the fall and spring terms.

For additional information on financial aid, students are encouraged to visit the financial aid website at www.cerritos.edu/finance or contact the Financial Aid Office at (562) 860-2451, extension 2397.

FEDERAL PROGRAMS

Federal Pell Grants are awarded to eligible undergraduate students. The amount of money awarded is based upon a student's Expected Family Contribution (EFC), the number of units enrolled, and the cost of attendance.

Approximately four weeks after a student has mailed his/her application, a Student Aid Report (SAR) should arrive at your home. Students must contact the Financial Aid Office to initiate their file.

Federal Supplemental Educational Opportunity Grant (FSEOG) is a campus-based program with limited funding. This program is awarded by the school on a “first-come, first-served” basis. Student must have a zero EFC and be enrolled in six units in order to be considered for this grant.

Federal Work Study (FWS) is a campus-based program with limited funding which provides employment to help pay for part of a student's educational costs. This program is based on financial need and, if awarded, is part of a student's award package. Students on FWS may work up to 15 hours per week on or off campus. Students are assigned to a work site by the FWS coordinator.

Federal Subsidized and Unsubsidized Stafford Loans must be repaid. Although these loans are made through lending institutions such as a bank, a student must apply for financial aid first. Once a student receives a financial aid award letter, the student may apply for a student loan. The amount of loans range from $2,625 to $3,500 per academic year.

To be eligible for the $3,500, a student must have at least 30 units completed and these units MUST appear on the student's official academic transcript at Cerritos College. Loan amounts will be determined at the time the Financial Aid Office certifies a loan application.

Both entrance/exit counseling are requirements of the Federal Family Educational Loan Program (FFELP). Students must maintain at least half-time enrollment status to receive a loan. Once a student receives loan funds, the student must maintain reasonable progress toward a certificate, associate degree, or transfer major.

Any student who is interested in the second loan, the Stafford Additional Unsubsidized loan ($4,000), must be an independent student and appeal to the Financial Aid Advisory Committee (FAAC). Appeal forms are available at the Financial Aid Office or on the financial aid website. In reviewing a request for any loan, the FAAC may use “professional judgment” to deny a student a loan on a case-by-case basis. If denied a loan, a student will receive a letter from the Financial Aid Office indicating the reason(s) for the loan denial.

Bureau of Indian Affairs (BIA) is a grant provided to eligible American Indian students. To be eligible a student must be at least one-fourth American Indian, Eskimo, or Aleut as certified by tribal agencies served by the Bureau of Indian Affairs. A student must be enrolled or plan to enroll as an undergraduate student on a full-time basis, or meet the enrollment requirements established by your tribe.

BIA grants are not awarded automatically. It is important that a student apply early to meet the deadlines set by the BIA. Students cannot apply through the Financial Aid Office. All BIA applicants must also complete the FAFSA. Students must request the BIA Grant Application from their tribe.

RETURN OF TITLE IV FUNDS

Federal aid recipients who withdraw or are dropped from ALL classes by the instructor are subject to new regulations regarding the Return of Title IV funds. Students who withdraw or are dropped from ALL classes prior to completing more than 60% of the enrollment period are subject to these rules. Based on the date of the complete withdrawal or drop, the Financial Aid Office will determine the amount, if any, of “unearned” federal financial aid received by the student. The calculation will begin by determining the percentage of the enrollment period completed by the students as follows:

• Number of days completed
• Total number of days in the semester

The result will equal the percentage of the enrollment period completed. The amount of federal financial aid that was paid or could have been paid to the student will be based on this percentage. If the student received more financial aid than the amount earned, the student will be billed for the overpayment. Financial aid recipients should be cautioned to (1) avoid total withdrawal from all classes, (2) successfully complete at least one class during the semester, and (3) repay any “unearned” financial aid as soon as possible to regain eligibility for financial aid.

In cases where a student receives all "F" grades, the student will be billed up to 50% of their aid until the student can provide documentation that the "F" grade was earned.

Any aid recipient who needs to withdraw from all classes should contact the Admissions and Records Office and the Financial Aid Office.
Recipient are encouraged to discuss alternatives to withdrawing from class(es) with their instructor(s) or a counselor before making a final decision.

Title IV funds are awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded.

**GRANT OVERAWARDS**

There are occasions when students receive financial aid payments based upon misreported information. This results in a grant overaward. Examples of misreported information include inaccurate or omitted income, prior loan defaults or grant overpayments, having a B.A. degree, not having a high school diploma or GED, forged signatures, and unsatisfactory academic progress, just to name a few.

Students who receive grant funds due to misinformation as noted above are required to repay THE ENTIRE SUM RECEIVED.

**STATE PROGRAMS**

The Cal Grant Program is a state funded educational opportunity program to assist students in paying for a college education. There are entitlement awards as well as competitive awards. Application deadlines are in early March and September for community college students.

All basic Cal Grant eligibility requirements are as follows: a) be a California resident, b) be a U.S. citizen or eligible non-citizen, c) meet U.S. Selective Service requirements, d) attend a qualifying California postsecondary institution, e) be enrolled at least half-time, f) maintain satisfactory academic progress as defined at the school of attendance, g) have family income and assets below the established ceilings, h) not be in default on any student loan, i) not owe any federal or state grant refund, and, j) not have a bachelor's or professional degree before receiving a Cal Grant (except for extended Cal Grant A or B awards for a teaching credential program).

Cal Grant A Entitlement Awards are for students who plan to attend a four-year college or university and are based on academic achievement as well as financial aid need. You may apply for a Cal Grant A while you are attending Cerritos College. If you are awarded one, you may place it on reserve until you transfer to a four-year college. This grant is renewable for up to three years, provided you remain eligible. Cal Grant A pays all or a portion of tuition and fees at your designated four-year institution.

Cal Grant A provides no funds for books, living costs, transportation expenses and provides no funds for fees at the community college.

Cal Grant B Entitlement Award requirements state that every graduating high school senior who has at least a 2.0 GPA, meets all the Cal Grant requirements and applies by March 2 within one year of graduating (or receiving their GED) is guaranteed a Cal Grant B Entitlement award. This Entitlement Award provides up to $1,551 for books and living expenses for the first year. Beginning with the second year of Cal Grant B benefits, this award also helps pay for tuition and fees at public or private four-year colleges or other qualifying institutions.

Cal Grant C Awards are available to assist students with tuition, fee, and training costs for occupational or vocational programs. The $576 Cal Grant C award provides for books, tools, and equipment. To qualify for Cal Grant C awards, students must meet basic eligibility requirements and be enrolled in a vocational program that is at least four months in length. For more information, visit the California Student Aid commission website at www.casc.ca.gov.

California Community College Transfer Entitlement Awards: Students who meet financial and basic eligibility requirements, have a minimum 2.4 GPA from a California Community College, and graduated from high school in 2000-01 or later are eligible for this award when transferring from a community college to a four-year institution. This Entitlement award is offered to California Community College students who were not awarded a Cal Grant within a year of graduating from high school, but meet certain requirements at the time of transfer from a California Community College to a qualifying institution offering baccalaureate degree programs.

Extended Opportunity Program and Services (EOPS) is a State funded program to provide educationally and economically disadvantaged students assistance, which includes grants, EOP nomination waivers, admission waivers to UC and CSU, and transfer assistance. Moreover, the EOPS Program provides a number of retention programs such as Supplemental Instruction (SI), and learning communities in the Achievement in Mathematics (AIM) program, and Summer Bridge program. All three programs involve social and academic integration activities for students outside of the classroom. Courses in these programs are taught by a faculty member and faculty counselor.

Admission into the EOPS Program requires that a student meet either BOGG A or B standards, complete a FAFSA application, enroll in 12 units, and meet with an EOPS counselor three times during each semester, and have earned less than 70 degree applicable units from ALL colleges/universities attended.

EOPS/CARE Grant is available to students who are current recipients of TANF, CalWORKs, single, head of household, have at least one child under the age of 14, enrolled in 12 units or more, and have been admitted into the EOPS Program. Students wishing to enter the program must attend a Mini-Conference/Orientation and workshops and may be eligible for a grant and/or service.

Board of Governors Grant (BOGG) is a program that provides assistance to cover community college enrollment fees. To be eligible, a student must be a California resident and must qualify under one of the following conditions:

1. Student or parent must currently be receiving Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI) or General Relief. Documentation is required;
2. Student must meet income standards based on family size. Documentation is required;
3. Student must have already applied for FAFSA and demonstrated financial need.

**SCHOLARSHIPS**

Scholarships are like grants; they do not have to be repaid. The Financial Aid Office is the steward of a number of scholarships that may or may not require financial need. Applications are available in the Financial Aid Office. For information on scholarships, visit www.cerritos.edu/scholarship.htm.

**OFFICE OF VETERANS AFFAIRS**

The Office of Veteran Affairs offers information regarding applications and certification for benefits for those eligible for Montgomery G.I. Bill, Selected Reserve, VEAP, Vocational Rehabilitation, or Survivors and Dependents of deceased or disabled veterans.

Staff is available to provide help with processing applications and to do check inquires to the Veteran Administration. Veterans must maintain district academic progress as outlined in the college catalog. In order to receive benefits, veterans must declare a major and will only be paid for classes required for that major as designated by the veteran academic counselor.

Please go to the Veterans Affairs website at www.cerritos.edu/admissions/veterans/vet-hours.html to view the service hours. Service hours vary each semester. You may also call (562) 860-2451, extension 2211, for information. The Veterans Affairs Office is located within the Admissions and Records Office area in the Administration Building.
Associate in Arts Degree
Graduation Requirements

The California Community College Board of Governors has authorized the Cerritos College Board of Trustees to confer the Associate in Arts Degree. A candidate does not automatically receive the Associate in Arts Degree upon completion of unit and course requirements, but is required to file a petition for the degree.

College education is usually thought of as consisting of two parts, specialized education and general education. Specialized education is that which prepares the student for vocational competence or for scholastic attainment in a particular field. This the student accomplishes through the department major.

General education, on the other hand, is that which meets the common goals of all students for personal enrichment and cultural development. Work in this area helps the student increase individual ability as a citizen and improve community, home, and family living.

Although courses may be designed with one or the other of these purposes as the primary gain, all courses are presented with the values of general education in mind. College education then becomes the sum total of all the student's experience in college, and the student's education may be completed in both these areas and be granted the degree of Associate in Arts.

STATEMENT OF PHILOSOPHY FOR GENERAL EDUCATION COURSEWORK

Cerritos College offers an array of general education coursework to students so that they may learn concepts and methods of inquiry that have breadth, depth and relevance to their lives. The general education curriculum includes coursework from the liberal arts, humanities, science, mathematics, arts and social sciences disciplines. Possession of knowledge from these disciplines will contribute to personal growth, professional development and citizenship by increasing students' awareness of the past and present by developing their creative, adaptive and critical thinking abilities. The general education curriculum will provide students with opportunities to

- Develop a lifestyle that will enhance physical and mental health and wellness
- Develop logical and cogent arguments, reaching conclusions that are based on comprehensive inquiry
- Adapt and apply technology to facilitate the acquisition and effective use of information
- Communicate clearly and proficiently through both oral and written expression
- Enhance the appreciation of artistic offerings
- Become informed citizens and problem-solvers to deal with current and future societal issues
- Appreciate the contributions of different cultures, eras and traditions to the human experience
- Develop an appreciation for the value of ethics, integrity, honesty, self-management and the welfare of others

REQUIREMENTS FOR THE ASSOCIATE IN ARTS DEGREE:

SCHOLARSHIP AND RESIDENCE

A. A student must complete 60 units of degree applicable work with an overall grade point average of “C” or better (2.0) in all courses.
B. A student must achieve a grade point average of “C” or better (2.0) in all course work attempted that is counted for the major.
C. A minimum of 12 units of degree applicable work must be completed at Cerritos College.
D. The student must be in attendance for the semester in which the degree is earned. Exception to this requirement is by petition only.

PETITION FOR ASSOCIATE IN ARTS DEGREE

1. Students desiring an Associate in Arts Degree must file a "Petition for Associate in Arts Degree" form. The petition may be obtained in the Counseling Center and must be submitted before the deadline posted in the College schedule of classes. The petition must be approved and validated by a counselor and the Admissions and Records Office before the degree will be granted.
2. Students not in continuous attendance at Cerritos College must meet degree requirements for graduation in effect at the time of readmission.
3. A student is considered in continuous attendance if he/she receives a grade (A,B,C,D,F,CR,NC, I or W) in any semester, fall or spring, during each academic year. Continuous attendance is not broken at Cerritos College if a student transfers to another accredited institution, maintains his/her continuous attendance at that institution, and returns to Cerritos College to complete his/her degree. (Designated programs may require students to return to Cerritos College in good standing. Please check with the Counseling Center regarding these programs.)
4. Credit toward the Associate in Arts Degree is not granted for non-degree applicable units or classes taken as part of the Adult Education Program.

STUDENTS WITH BACCALAUREATE DEGREES

Those students who have been awarded a bachelor's degree from an accredited college or university in the United States will be exempt from the Cerritos College general education breadth requirements and the proficiency requirements, should they pursue an associate in arts degree at this institution. Please see your counselor or the Dean of Academic Affairs if additional information or clarification is desired.

ADDITIONAL ASSOCIATE IN ARTS DEGREES

Once an AA degree has been obtained an additional AA degree maybe obtained by meeting the following conditions:
1. Complete a minimum of seventy-eight (78) units - eighteen (18) degree applicable units beyond the minimum required for the first A.A. Degree. The minimum 78 units must meet the requirements in a different major curriculum. All general education requirements in effect at the time continuous attendance began must be met.
2. If some or all of the major curriculum requirements for the second A.A. Degree were met in the first A.A. Degree and the minimum seventy-eight (78) degree applicable units is not achieved, then additional courses will be planned with a counselor to make-up the difference as described in the procedures. The general education requirements must be met which were in effect at the time continuous attendance began.
3. Upon completion of the required course work, follow the “Petition for Graduation” procedures as detailed for the first A.A.
4. Additional A.A. Degrees may be granted for each eighteen (18) degree applicable additional units completed. For example, a third A.A. degree may be earned upon the completion of a minimum of ninety-six (96) units. The requirements to obtain additional degrees are the same as those stated above for a second A.A. Degree.

COMMENCEMENT

Commencement exercises are held once a year at the end of the Spring Semester for all students—those who graduated at midyear, those graduating at the end of the Spring Semester, and those who expect to complete requirements for graduation in the Summer Session.

All graduating students are encouraged to participate in the Commencement ceremony which honors their industry and achievement.
Cerritos College
Associate in Arts Degree

Requirements for the Associate in Arts Degree at Cerritos College can be met in one of three different ways: Plan A, B or C.

**PLAN A** is designed primarily for those students interested in preparing for a vocational career upon graduation. Plan A may also be used by university transfer students and for students in vocational majors who may possibly wish to transfer in the future. However, there are courses listed under Plan A that are not transferable for general education credit to the four-year universities. Therefore, students wishing to use this option should see a Cerritos College counselor for advice in selecting the AA General Education plan that in combination with a major will best match their educational and career goals. Please see the Plan A degree description page for further details.

**PLAN B** is designed primarily for students who will transfer to a CSU campus and are not interested in attending a University of California campus. Students may use this plan to combine completion of both the Associate in Arts general education requirements, and the California State University (CSU) General Education Certification pattern. Students should see a counselor for advice on selecting the AA General Education plan that in combination with a major will best match their educational and career goals. Please see the Plan B degree description page for further details.

**PLAN C** is designed primarily for students who intend to transfer to the University of California, or who are undecided between transferring to the University of California or the California State University. Students may use this plan to combine completion of both the AA degree general education requirements and the Intersegmental General Education Transfer Curriculum (IGETC) requirements. Plan C may not be recommended for some majors at certain CSU or UC campuses. Please see the Plan C description page for further details.

*The significant differences between Plan A, Plan B and Plan C are:

**PLAN A** requires the completion of a minimum of 18 units of identified general education courses and requirements and a minimum of 18 units of specified "major" courses, proficiency requirements and electives, if necessary, to total a minimum of 60 degree applicable units.

**PLAN B** requires a minimum of 39 units of identified CSU general education courses and requirements plus specified lower-division major preparation, the health and wellness proficiency requirement, and elective courses, if necessary, for a minimum of 60 degree applicable units.

If a student only wishes to transfer at an upper division level and is not seeking an A.A. degree, a minimum of 60 CSU transferable units is required. (See transfer requirements for CSU)

**PLAN C** requires a minimum of 34 (UC) or 37 (CSU) units of identified general education courses and requirements plus specified lower-division major preparation courses, the health and wellness proficiency requirement, and electives, if necessary, to total a minimum of 60 degree applicable units.

If a student only wishes to transfer at an upper division level and is not seeking an A.A. degree, a minimum of 60 UC transferable units is required. (See IGETC and UC transfer requirements.)

There are important differences among the three plans. In order to select the plan that best meets each individual's AA and transfer goals, students should see a Cerritos College counselor.
## Associate in Arts Degree
### General Education
#### 2006-07
#### Plan A

**Degree and/or Career Option**

A total of 60 degree applicable units including the following requirements must be completed to qualify for the A.A. degree:

1. **MAJOR PROGRAM REQUIREMENTS:**
   Complete all requirements for the chosen major program under “Major Requirements” in the Cerritos College Catalog.

2. **MATHEMATICS PROFICIENCY REQUIREMENT:**
   This requirement can be met by one of the following options:
   a. Earn a score on the Intermediate Algebra Readiness test sufficient for placement in a course above the level of MATH 60 or
   b. Completion of MATH 60, CIS 52 or TM 50 with a grade of Credit or “C” or higher, or
   c. For other options, see your counselor

3. **READING PROFICIENCY REQUIREMENT:**
   a. The reading proficiency requirement is met by successfully completing the Reading Proficiency Test at the 12th grade level. The Reading Proficiency Test may be taken no more than once each semester.
   b. The reading proficiency requirement may be met by completing READ 54 with a grade of “C” or better.
   c. For other options, see your counselor

4. **WRITING PROFICIENCY REQUIREMENT:**
   Completion of ENGL 52 or ENGL 155 or BCOM 147 with a grade of “C” or better, or completion of ENGL 100 with a grade of “C” or better.

5. **HEALTH AND WELLNESS PROFICIENCY REQUIREMENT:**
   This requirement can be met by one of the following options:
   a. Completion of at least one unit of a Physical Education activity course from the approved department list below:
   
   
   b. Completion of HED 100, 101, 103, or 200, TH 140-143, MUS 160-164, HO 100, 151 or 152, CDEC 161 or PE 100.
   
   c. Enrollment and completion of Allied Health program (DA, DH, RN, PTA, Pharm Tech, MA)
   
   d. For other options, see your counselor

6. **GENERAL EDUCATION REQUIREMENTS: PLAN A 18 UNITS**

   a. **NATURAL SCIENCES: 3 UNITS MINIMUM FROM EITHER PHYSICAL SCIENCE OR BIOLOGICAL SCIENCES**

   (1) **Physical Sciences**
   - Astronomy 101, 102, 103, 104, 105L (lab), 106
   - Chemistry 100 (lab), 110 (lab), 111 (lab)
   - Earth Science 101, 101L (lab), 104, 106, 110 (lab)
   - Energy 110
   - Geography 101, 101L (lab)
   - Geology 101 (LAB), 110, 201 (lab), 204, 207 (lab), 209 (lab)
   - Physical Science 100, 112 (lab)
   - Physics **50 (lab), 100 (lab), 101 (lab), 201 (lab)

   (2) **Biological Sciences**
   - Anatomy and Physiology 120 (lab), 130 (lab), 150 (lab), 151 (lab), 200 (lab)
   - Anthropology 115
   - Biology 105, 110 (lab), 115 (lab), 120 (lab), 200 (lab)
   - Botany 120 (lab)
   - Microbiology 200 (lab)
   - Psychology 241
   - Zoology 120 (lab)

   b. **SOCIAL AND BEHAVIORAL SCIENCES: 3 UNITS MINIMUM**

   Examination Option: The History or Political Science requirement may be satisfied by proficiency examinations. If both exams are passed, the student is still required to select three units from below.

   **NOTE:** Completion of a U.S. history or government course which fulfills the California State University requirement taken at any accredited institution may be used in lieu of the course requirement.

   One course from Section B1 or B2 is required.

   (1) History 101, 102, 103

   (This requirement can be met by successfully passing the departmentally administered and evaluated proficiency examination for American History, or receiving a score of 3 or better on the College Board's Advanced Placement Exam, American History, or the College Board's College Placement Test, American History and Social Studies. Unit credit is awarded for passing the AP exam option with a score of 3 or better. Unit credit is not awarded for the departmental exam and only applies to the A.A. degree).

   (2) Political Science 101 or 201

   (This requirement can be met by successfully passing the departmentally administered and evaluated proficiency examination for American Government or the College Board's Advanced Placement exam. Unit credit is awarded for passing the Advanced Placement exam option with a score of 3 or better. Unit credit is not awarded for passing the department exam and only applies to the AA degree).

   (3) Social and Behavioral Sciences

   Administration of Justice 101
   Anthropology 100, 120, 170, 200, **201, **202, 203, 205
   Child Development/Early Childhood **113
   Counseling and Guidance **150, 200
   Economics 101, 102, 201, 202, 204
   Geography 102, 105
History 110, 120, 204, 210, 220, 221, 230, 235, 241, 242, 245, 246, 250, 255, 260, 265, **270
Journalism 100
Political Science 110, 210, 220
Psychology 101, 150, 251, 261, 271
Sociology 101, 110, 120, 201, 210, 215, **225, 230, **250
Speech 110
Women's Studies 101, 204, 205, 206

c. FINE ARTS AND HUMANITIES: 3 UNITS MINIMUM FROM EITHER FINE ARTS OR HUMANITIES
Note: Courses appearing in more than one category may be used to satisfy only one category. Such courses are marked with an *.

(1) FINE ARTS
Architecture **110, 112
Art 100, 101, 102, 103, 104, 106, 107, *108, *109, 110, 116, 120, 130A, 144, 150, **186, **192, 193
Humanities: *108, *109
Music 100, 101, 102, 103, 104, 104B, 105
Photography 100, 160
Physical Education 191
Theatre 101, 102, 103, 104, **110, 150, RTV 151/TH 151, RTV 152, TH 159

(2) HUMANITIES
Art *108, *109
French 101, 102, 201, 202
German 101, 102, 201, 202
Humanities 100, *108, *109
Japanese 101, 102, 201, 202
Philosophy 100, 102, 104, 200, 201, 204, 206
Sign Language 101, 102, 201
Spanish 101, 102, 111, 112, 201, 202, 206, 210, **245
Speech 140, **145
Women's Studies 102

d. LANGUAGE AND RATIONALITY: 6 UNITS MINIMUM
Select at least three units from Section D1 and three units from Section D2:

(1) ENGLISH COMPOSITION
English **52, 100, **155
Business Communication **147

(2) COMMUNICATION AND ANALYTICAL THINKING
Business Communication **148
Computer and Information Sciences **52, **101, **102, **103, **178
Engineering Design Technology **131
English 101, 103
Mathematics **60, **70, **80, **80A, 100, 110A, 110B, 112, 114, 115, 116, 140, 150, 170
Philosophy 106, 202
Psychology 103, 210
Reading **200
Speech **60, 100, 120, 130, 132, 150, 235, **271
Technical Mathematics **50

e. Select an additional course from general education courses from those listed above or a course from Plan B or Plan C so that the earned general education units total at least 18.

* These courses appear in more than one category, but may only be counted once.
** These courses do not meet the General Education Requirements for CSU or IGETC.

NOTE: The preceding graduation requirements apply to students who were in attendance during the 2006-07 school year and thereafter. Students who enrolled prior to Fall 2006 and who have maintained continuous attendance at Cerritos College have the option of meeting the current requirements or those in effect at the time continuous attendance began.
Associate in Arts Degree
General Education
2006-07
Plan B
CSU General Education Requirements

Plan B is designed primarily for students who will transfer to a California State University (CSU) campus and are not interested in attending a University of California campus. Students may use this plan to combine completion of both the Associate in Arts general education requirements and the CSU General Education Certification pattern. Students should see a counselor for advice on selecting the AA General Education plan that in combination with a major will best match their educational and career goals.

To earn an Associate in Arts Degree using Plan B, students must complete a minimum of 60 degree applicable units with an overall grade point average of “C” (2.0) or which must include the specified general education requirements and designated courses for a major. The Health and Wellness Proficiency requirement must be completed.

If a student wishes only to transfer and is not seeking an A.A. degree, there are no proficiencies required for CSUGE certification.

It should be noted that completion of the CSU General Education Certification is not required for admission to the CSU nor is it the only way to fulfill the lower division general education requirements. Depending upon the student’s major, it may be advantageous to complete the requirements of the specific campus the student plans to attend.

STATE UNIVERSITY GENERAL EDUCATION CERTIFICATION REQUIREMENTS

A maximum of 39 units is required to fulfill the CSU lower division general education requirements, with the units to be distributed as follows: Nine (9) units in Area A; nine (9) units in Areas B, C and D, with no more than 30 units total in areas B through D combined; and three (3) units in Area E.

A letter grade of “C” or better is required in Oral Communication, Written Communication, Critical Thinking, and Mathematical Concepts.

Note: Courses appearing in more than one category may be used to satisfy only one category. Such courses are marked with an *.

A. Communications: 9 units minimum.
   Must take one course from category 1, 2, and 3
   1. Oral Communication
      Speech 100, 120, 130, 132, 150
   2. Written Communication
      English 100
   3. Critical Thinking
      English 103, Philosophy 106, 202, Psychology 103, Speech 235

B. Natural Science and Mathematics: 9 units minimum.
   Take a course from category 1, 2 and 3. AT LEAST ONE LABORATORY (LAB) MUST BE INCLUDED IN CATEGORY 1 or CATEGORY 2.
   1. Physical Sciences
      Astronomy 101, 102, 103, 104, 105L (lab), 106
      Chemistry 100 (lab), 110 (lab), 111 (lab)
      Earth Science 101, 101L (lab), 104, 106, 110 (lab)
      Energy 110
      Geography 101, 101L (lab)
      Geology 101 (lab), 110, 201 (lab), 204, 207 (lab), 209 (lab)
      Physical Science 100, 112 (not considered a LAB science for CSU GE)
      Physics 100 (lab), 101 (lab), 201 (lab)

2. Biological Sciences
   Anatomy and Physiology 120 (lab), 130 (lab), 150 (lab), 151 (lab), 200 (lab)
   Anthropology 115
   Biology 105, 110 (lab), 115 (lab), 120 (lab), 200 (lab)
   Botany 120 (lab)
   Microbiology 200 (lab)
   Psychology 241
   Zoology 120 (lab)

3. Mathematical Concepts
   Mathematics 100, 110A, 110B, 112, 114, 115, 116, 140, 150, 170
   Psychology 210

C. Fine Arts and Humanities: 9 units minimum.
   Take one course in category 1 and 2. The third course may be taken in either category

Note: Courses appearing in more than one category may be used to satisfy only one category. Such courses are marked with an *.

1. Fine Arts
   Architecture 112
   Humanities *108, *109
   Music 100, 101, 102, 103, 104, 104B, 105
   Photography 100, 160
   Physical Education 191
   Theatre 101, 102, 103, 104, 150, RTV 151/TH 151, RTV 152, TH 159

2. Humanities
   Art *108, *109
   French 101, 102, 201, 202
   German 101, 102, 201, 202
   Humanities 100, *108, *109
   Japanese 101, 102, 201, 202
   Philosophy 100, 102, 104, 200, 201, 204, 206
   Sign Language 101, 102, 201
   Spanish 101, 102, 111, 112, 201, 202, 206, 210
   Speech 140
   Women’s Studies 102

D. Social Sciences: 9 units minimum.
   Take one course in category 1, 2 and 3.
   1. American History
      History *101, *102, *103
      (Any one of these courses meet the requirement in U.S. History)
2. American Government
   Political Science 101, 201
   (Either of these courses meet the requirement for
   Constitution and American Ideals)

3. Social, Political, Historical and Economic Institutions
   Administration of Justice 101
   Anthropology 100, 120, 170, 203, 205
   Economics 101, 102, 201, 202, 204
   Geography 102, 105
   Journalism 100
   Political Science 110, 210, 220
   Psychology 101, 251, 261, 271
   Sociology 101, 201, 210, 215, 230
   Speech 110
   Women's Studies 101, 204, 205, 206

E. Self-Development: 3 units minimum.
   Take one course from the following:
   Counseling and Guidance 200
   Health Education 100, 101
   Physical Education 141
   Psychology 150
   Sociology 110, 120

* These courses appear in more than one category, but may be used
  only to satisfy one category.

NOTE: Changes in the above General Education requirements
may occur from time to time. If courses are added to or deleted
from the pattern, this may affect a student's selection of courses.
Students do not have catalog rights to a certification pattern,
regardless of their continual attendance status.

CSU Transfer credit is noted in individual catalog course descriptions.
A complete list of CSU transferable course offered by Cerritos College can
be found on ASSIST website at www.assist.org.
Plan C is designed primarily for students who intend to transfer to the University of California (UC) or are undecided between transferring to the UC or the California State University (CSU). Students may use this plan to combine completion of both the AA Degree general education requirements and the IGETC General Education requirements.

The purpose of IGETC is to provide an option for students to fulfill lower division general education requirements prior to transferring to a UC or CSU campus. Depending upon the student's major and campus choice, it may be advantageous to complete the requirements of the specific campus the student plans to attend. In general, it is not advisable for transfer students preparing for majors at any UC campus requiring a high number of units, such as engineering and science, to use IGETC.

Plan C can be fulfilled by completing the IGETC requirements specified for either the UC or CSU.

A letter grade of “C” or better is required in all Plan C courses.

To earn an Associate in Arts degree using Plan C, students must complete a minimum of 60 degree applicable units with a grade point average of “C” (2.0) or better which must include the specified general education requirements and designated courses for a major. The Health and Wellness Proficiency requirement must be completed.

If a student wishes only to transfer and is not seeking an A.A. degree, there are no proficiencies required for IGETC certification.

It should be noted that completion of IGETC is not required for admission to the UC or CSU.

Further information and other regulations pertaining to IGETC and the Associate in Arts Degree are found in the catalog.

AREA 1 ENGLISH COMMUNICATION

CSU: Courses from A, B, and C required.
UC: Courses from A and B required.

A) English Composition
(1 course, 3 semester/4-5 quarter units)
English 100

B) Critical Thinking-English Composition
(1 course, 3 semester/4-5 quarter units)
English 103
Philosophy 202
Psychology 103
Speech 235

C) Oral Communication (CSU ONLY)
(1 course, 3 semester/4-5 quarter units)
Speech 100 +, 120, 130, 132+

AREA 2 MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING
(1 course, 3 semester/4-5 quarter units)
Mathematics 100, 112+, 114+, 115, 116+, 150+, 170+, 190, 220, 240
Psychology 210+

AREA 3 ARTS AND HUMANITIES
(3 courses, with at least one from A and one from B below; 9 semester/12-15 quarter units)

A. Arts
Architecture 112
Humanities *108, *109
Music 100, 101, 103, 104, 104B, 105
Photography 160
Physical Education 191
Theatre 101, 102, 103, 104, 150, 159

B. Humanities
Art *108, *109
French 201, 202
German 102, 201, 202
Humanities 100, *108, *109
Japanese 102
Philosophy 100, 102, 104, 200, 201, 204, 206
Sign Language 201
Spanish 102+, 112+, 201, 202, 210
Women's Studies 102

AREA 4 SOCIAL AND BEHAVIORAL SCIENCES
(3 courses from at least two disciplines or an interdisciplinary sequence: 9 semester/12-15 quarter units)

Anthropology 100, 120, 170, 200
Economics 101+, 102, 201, 202
Geography 102, 105
Political Science 101+, 201+, 210, 220, 230
Psychology 101, 150, 251, 261, 271
Sociology 101, 120, 201, 210, 215
Speech 110
Women's Studies 101, 204, 206

AREA 5 PHYSICAL AND BIOLOGICAL SCIENCES
(2 courses, one from A and one from B below; at least one course must include laboratory (lab); 7-9 semester/9-12 quarter units)

A. Physical Sciences
Astronomy 101, 102+, 103+, 104, 105L (lab) 106
Chemistry 100+ (lab), 110+ (lab), 111 (lab), 112 (lab)
Earth Science 101, 101L (lab), 104, 110+ (lab)
Geography 101, 101L (lab)
Geology 101+ (lab), 110+, 201 (lab), 207 (lab), 209 (lab)
Physical Science 100+
Physics 100+ (lab), 101+ (lab), 102+ (lab), 201+ (lab), 202+ (lab), 203+ (lab)
B. Biological/Life Sciences
   Anatomy and Physiology 120+ (lab), 130+ (lab), 150 + (lab),
   151 + (lab), 200+ (lab), 201+ (lab)
   Anthropology 115
   Biology 115 (lab), 120+ (lab), 200 (lab), 201 (lab)
   Botany 120 (lab)
   Microbiology 200 (lab)
   Psychology 241
   Zoology 120 (lab)

* These courses appear in more than one category, but may be used only
to satisfy one category.

ADDITIONAL REQUIREMENTS

A) UC ONLY: Language other than English
   There are several ways to satisfy this requirement. They include:
   a. Complete two years of the same foreign language in high
      school with a grade of “C” or better.
   b. Complete first college course in any foreign language or SL
      101.
   c. Earn a minimum score of 500 on an appropriate College
      Board Achievement Test in a foreign language.
   d. For other options, see your counselor.

B) CSU ONLY: The CSU has a specific American Institutions
   requirement that is separate from the general education
   requirements. Courses used to meet the American Institutions
   requirement may NOT be used to satisfy requirements for the
   IGETC. It is recommended that this requirement be met prior to
   transfer. The following will meet the CSU American Institutions
   requirement.
   6 units, one course from Group 1 and one course from Group 2.
   Group 1: History 101+, 102+, 103+
   Group 2: Political Science 101+, 201+

C) The UC-bound student should be aware of the American history
   and institutions requirements at the campus of choice.
   Requirements do vary. See your counselor for details.

+Credit limitation. UC credit limitations may apply for certain courses in
IGETC, as well as other UC transferable courses which are not in IGETC.
An explanation for each course which has credit limitations appears in
the college catalog course description. For details, see your counselor.
Transfer Requirements

Students planning to transfer to a four-year college or university should bear in mind that admission and subject requirements will vary from school to school. Consequently, students planning to transfer should study carefully the requirements set forth in the catalogs and brochures of the institutions which interest them. Such publications may be obtained directly from the colleges and universities. A large number of websites allow students to access such information via the Internet. Many of these links are available at the Transfer Center Website, www.cerritos.edu/transfer. In addition to offering transfer information to public and private colleges and universities statewide and national, we are continuing our efforts to obtain articulation agreements for transferring to Historically Black Colleges and Universities (HBCU’s). To assure that appropriate transfer course work is being undertaken at Cerritos College, students should plan to communicate regularly with the counseling staff.

THE CALIFORNIA STATE UNIVERSITY

Lower Division Transfer Requirements—If you have completed fewer than 60 transferable semester (90 quarter) units, you will qualify for admission if you have a grade point average of 2.0 (C) or better in all transferable units attempted, are in good standing at the last college or university attended, and meet the admission requirements for first-time freshmen, i.e., you have completed with a grade of “C” or better each of the courses in the comprehensive pattern of college preparatory subject requirements and have a qualifiable eligibility index. If you did not complete all the subject requirements in high school, appropriate college courses may be used to make up the missing subjects. Nonresidents must meet the eligibility index for nonresidents. NOTE: Not all California State Universities accept lower division transfers. Please go to www.csumentor.edu to find out more.

Upper Division Transfer Requirements—Completion of at least 60 transferable semester (90 quarter) units, a grade point average of 2.0 (C) or better in all transferable units attempted (nonresidents must have a grade point average of 2.4), and in good standing at the last college or university attended. In addition, you must have completed at least 30 semester (45 quarter) units of college courses with a grade of C or better in each course to be selected from courses in English, arts and humanities, social science, science and mathematics at a level at least equivalent to courses that meet general education requirements. The 30 semester (45 quarter) units must include all of the general education requirements in communication in the English language (at least 9 semester or 12 quarter units to include written communication, oral communication, and critical thinking) and mathematics (at least 3 semester or 4 quarter units) or, if completing the Intersegmental General Education Transfer Curriculum, English language (at least 9 semester or 12 quarter units in English composition, oral communication, and critical thinking) and the requirement in mathematics (at least 3 semester or 4 quarter units).

Test Scores—Freshman and transfer applicants who have fewer than 60 semester or 90 quarter units of transferable college credit must submit scores, unless exempt, from either the Scholastic Aptitude Test (SAT) of the College Board or the American College Testing Program (ACT). If you are applying to an impacted program and are required to submit test scores, you should take the test no later than December if applying for fall admission.

Registration forms and dates for the SAT or ACT are available from school or college counselors or from a campus testing office. Or you may write to:

<table>
<thead>
<tr>
<th>The College Board (SAT)</th>
<th>American College Testing Program (ACT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Unit, Box 592</td>
<td>Registration Unit, P.O. Box 168</td>
</tr>
<tr>
<td>Princeton, New Jersey 08541</td>
<td>Iowa City, Iowa 52240</td>
</tr>
</tbody>
</table>

TOEFL Requirement—All undergraduate applicants, regardless of citizenship, who have not attended schools at the secondary level or above for at least three years where English is the principal language of instruction must present a minimum score of 500 or above on the Test of English As a Foreign Language. Some campuses may require a score higher than 500.

Transcripts—Final official transcripts must be submitted prior to enrollment to verify that all required coursework has been completed successfully. CSU campuses will either delay admission or not permit registration or attendance until receipt of final transcripts.

Freshman: The campus to which you are applying will provide information about when to submit your official high school transcript. Transcripts must be received in sealed envelopes directly from the high school from which you graduated.

Transfers: Request that official transcripts be sent directly from all colleges or universities previously attended even if no coursework was completed. Transcripts must be received in sealed envelopes from each institution attended. You should keep personal copies of all transcripts and test scores to complete the admission application and for academic advising sessions.

Starting Fall 2005 CSU applications will only be able to apply online.

GENERAL EDUCATION REQUIREMENTS FOR THE BACHELOR’S DEGREE AT THE CALIFORNIA STATE UNIVERSITY

The California Administrative Code, Title 5, relating to the State University general education breadth requirements authorizes Cerritos College to present to the students a maximum 39-unit pattern of general education courses which is acceptable for the Bachelor Degree requirements at the State University.

Cerritos College is further authorized to certify the partial or complete fulfillment of these requirements. Cerritos College Level Examination Program (CLEP) credit granted at Cerritos College will not be used to certify general education requirements for transfer. Credits from International Transcripts granted at Cerritos College will not be used to certify general education requirements for transfer.

Students may elect to fulfill the general education requirements by following the Cerritos College pattern or the pattern specified by the State University of their choice.

Students in all major fields of study must complete the same pattern of general education requirements. It is strongly recommended that students complete as many units of these requirements as possible during their freshman and sophomore years at Cerritos College so that they can concentrate on major specialization in the upper division.

In general, four-year colleges accept at full unit value approved transfer courses completed with satisfactory grades in the public Community Colleges of the state. However, in most instances a maximum of 70 community college semester units (105 quarter units) can be transferred for credit toward a degree at the senior institution.
STATE UNIVERSITY GENERAL EDUCATION
CERTIFICATE REQUIREMENTS

A maximum of 39 units is required to fulfill the CSU lower division general education requirements, with the units to be distributed as follows: Nine (9) units in Area A; nine (9) units in Areas B, C, and D, with no more than 30 units total in areas B through D combined; and three (3) units in Area E.

A letter grade of “C” or better is required in Oral Communication, Written Communication, Critical Thinking, and Mathematical Concepts.

NOTE: Courses appearing in more than one category may be used to satisfy only one category. Such courses are marked with an *.

A. COMMUNICATIONS: 9 units minimum.
Must choose one course from category 1, take the one course in category 2 and choose one course from category 3.

1. ORAL COMMUNICATION
Speech 100, 120, 130, 132, 150

2. WRITTEN COMMUNICATION
English 100

3. CRITICAL THINKING
English 103, Philosophy 106, 202, Psychology 103, Speech 235

B. NATURAL SCIENCE AND MATHEMATICS: 9 units minimum.
Choose one course from category 1, one course from category 2 and one course from category 3. AT LEAST ONE LABORATORY (LAB) MUST BE INCLUDED IN CATEGORY 1 or CATEGORY 2.

1. PHYSICAL SCIENCES
Astronomy 101, 102, 103, 104, 105L (LAB), 106
Chemistry 100 (LAB), 110 (LAB), 111 (LAB)
Earth Science 101, 101L (LAB), 104, 106, 110 (LAB)
Energy 110
Geography 101, 101L (LAB)
Geology 101 (LAB), 110, 201 (LAB), 204, 207 (LAB), 209 (LAB)
Physical Science 100, 112 (not considered a LAB science for CSU GE)
Physics 100 (LAB), 101 (LAB), 201 (LAB)

2. BIOLOGICAL SCIENCES
Anatomy and Physiology 120 (LAB), 130 (LAB), 150 (LAB), 151 (LAB), 200 (LAB)
Anthropology 115
Biology 105, 110 (LAB), 115 (LAB), 120 (LAB), 200 (LAB)
Botany 120 (LAB)
Microbiology 200 (LAB)
Psychology 241
Zoology 120 (LAB)

3. MATHEMATICAL CONCEPTS
Mathematics 100, 110A, 110B, 112, 114, 115, 116, 140, 150, 170
Psychology 210

C. FINE ARTS AND HUMANITIES: 9 units minimum.
Choose at least one course from category 1 and at least one course from category 2.

1. FINE ARTS
Architecture 112
Humanities *108, *109
Music 100, 101, 102, 103, 104, 104B, 105
Photography 100, 160
Physical Education 191
Theatre 101, 102, 103, 104, 150, RTV 151/TH 151, RTV 152, TH 159

2. HUMANITIES
Art *108, *109
French 101, 102, 201, 202
German 101, 102, 201, 202
Humanities 100, *108, *109
Japanese 101, 102, 201, 202
Philosophy 100, 102, 104, 200, 201, 204, 206
Sign Language 101, 102, 201
Spanish 101, 102, 111, 112, 201, 202, 206, 210
Speech 140
Women's Studies 102

D. SOCIAL SCIENCES: 9 units minimum.
Choose one course from category 1, one course from category 2 and one course from category 3.

1. AMERICAN HISTORY
History *101, *102, *103
(Any one of these courses meets the requirement in U.S. History)

2. AMERICAN GOVERNMENT
Political Science 101, 201
(Either of these courses meets the requirement for Constitution and American Ideals)

3. SOCIAL, POLITICAL, HISTORICAL AND ECONOMIC INSTITUTIONS
Administration of Justice 101
Anthropology 100, 110, 120, 170, 203, 205
Economics 101, 102, 201, 202, 204
Geography 102, 105
Journalism 100
Political Science 110, 210, 220
Psychology 101, 251, 261, 271
Sociology 101, 201, 210, 215, 230
Speech 110
Women's Studies 101, 204, 205, 206
E. SELF-DEVELOPMENT: 3 units minimum.
Choose one course from the following:
Counseling and Guidance 200
Health Education 100, 101
Physical Education 141
Psychology 150
Sociology 110, 120

NOTE: Changes in the above General Education requirements may occur from time to time. If courses are added to, or deleted from the pattern, it may affect a student's selection of courses. Students do not have catalog rights to a certification pattern, regardless of their continual attendance status.

Please consult a counselor for any changes which may have occurred in the general education pattern, or if you have questions.

CSU Transfer credit is noted in individual catalog course descriptions. A complete list of CSU transferable course offered by Cerritos College can be found on the ASSIST website at www.assist.org.

UNIVERSITY OF CALIFORNIA TRANSFER REQUIREMENTS

Starting Fall 2005 UC applicants will only be able to apply online.

Admission as a Transfer for Students Entering UC in Fall 1998 and after.

The University considers you a transfer applicant if you graduated from high school and enrolled in a regular session at another college or university. You can't disregard your college record and apply as a freshman.

If you plan to attend a California community college before applying to the University, you should take courses that are transferable, that satisfy University and college requirements, and that fulfill prerequisites in your major. Advisors in the Admissions Office at the campus you wish to attend and community college counselors can help you with your planning.

The University publishes a booklet especially for transfer applicants called Answers for Transfers. It is available at the Transfer Center located in Career Services.

CALIFORNIA RESIDENTS

There are basically three ways in which you can meet the University's minimum admission requirements for transfer students. These requirements are described below.

*Residency Status: The requirements for bonafide California residents also apply to dependents of University of California graduates and employees. The manner in which legal residence is defined for tuition purposes is different. If you have questions about your residency status, contact the Admissions or Registrar's Office at the campus you wish to attend.

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---you are eligible to transfer if you have a "C" (2.0) average in your transferable college coursework.

2. If you met the Scholarship Requirement, but did not satisfy the Subject Requirement,* you must take transferable courses in the subjects you are missing to be eligible to transfer. You will need to earn a grade of C or better in each of these required courses, and an overall "C" (2.0) average in all U.C. transferable college coursework. If you completed less than 18 quarter or 12 semester units of U.C. transferable college coursework, you must satisfy the Examination Requirement for freshman applicants.

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, or you did not meet the Scholarship Requirement and did not complete all the required "a-f" subjects,* you must:
   a. Complete 60 semester units or 90 quarter units of U.C. transferable college credit with a grade point average of at least 2.4, and
   b. Complete a course pattern requirement to include:
      1. Two transferable college courses (3 semester or 4-5 quarter units each) in English composition; and
      2. One transferable college course (3 semester or 4-5 quarter units) in Mathematical Concepts and Quantitative Reasoning; and
      3. 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, the physical and biological sciences.

   *If you graduated from high school before June 1986, your “c” and “f” subject requirements are different from those described previously. Please contact the Admissions Officer at any U.C. campus for more information.

NONRESIDENTS

The minimum admission requirements for nonresident transfer applicants are the same as those for residents except that nonresidents must have a grade point average of 2.8 or higher in all transferable college coursework.

TRANSFERABLE COURSES TO UNIVERSITY OF CALIFORNIA

Please see your counselor or the Transfer Center Coordinator for all courses that have been accepted by any campus of the University of California as transferable for the 2006-07 school year.
**INTERSEGMETAL GENERAL EDUCATION TRANSFER CURRICULUM**

The Intersegmental Committee of the Academic Senates approved the Intersegmental General Education Transfer Curriculum (IGETC) which was implemented Fall 1991. The IGETC is a series of courses that community college students can use to satisfy lower divisions general education requirements at any CSU or UC campus. The IGETC is intended to facilitate course planning and should appeal to students who want to keep their options open before making a final decision about transferring to a particular segment or campus. The IGETC will provide an option to the California State University General Education Requirements.

**FOR STUDENTS TRANSFERRING TO A UC CAMPUS**

In general, it is not advisable for transfers to engineering majors at any UC campus to use the IGETC. The IGETC option may also be inappropriate for transfers entering “high unit” majors such as those in the sciences having substantial lower division science and math prerequisites. It may be more appropriate to take courses that are a part of the general education or breadth requirements for the school or college on the UC campus to which a transfer is planned.

**FOR STUDENTS TRANSFERRING TO A CSU CAMPUS**

It is important to note that IGETC is an option for CSU bound students. IGETC requirements may be followed by both continuing and new students who plan to transfer to a California State University.

The Intersegmental General Education Transfer Curriculum will permit a student to transfer from a California community college to a campus in either the California State University or the University of California system without the need, after transfer, to take additional lower-division, general education courses to satisfy campus G.E. requirements.

Completion of the IGETC is not a requirement for transfer to a CSU or UC, nor is it the only way to fulfill the lower-division, general education requirements of the CSU or UC prior to transfer. Students may find it advantageous to take courses fulfilling CSU’s general education requirements or those of a particular UC campus.

The course requirements for ALL areas must be completed PRIOR to transferring to the CSU or UC in order for the IGETC to be certified. However, beginning Fall 2000 a student may be partially certified if they are missing no more than 2 courses and they are able to show good cause for not having the missing courses completed. The missing courses may only be from areas 3, 4, 5, or language other than English. Areas 1 and 2 must be completed in all cases. See your counselor to determine eligibility for partial certification. All courses must be completed with a grade of “C” or better. A student who has completed IGETC may have an official certification sent to a four-year institution upon written request by the student through the Office of Admissions and Records.

NOTE: COURSES APPEARING IN MORE THAN ONE CATEGORY MAY BE USED TO SATISFY ONLY ONE CATEGORY. SUCH COURSES ARE MARKED WITH AN *.

**AREA 1  ENGLISH COMMUNICATION**

CSU: Courses from A, B, and C required.
UC: Courses from A and B required.

A) English Composition  
(1 course, 3 semester/4-5 quarter units)  
English 100

B) Critical Thinking-English Composition  
(1 course, 3 semester/4-5 quarter units)  
English 103  
Philosophy 202  
Psychology 103  
Speech 235

C) Oral Communication (CSU ONLY)  
(1 course, 3 semester/4-5 quarter units)  
Speech 100+, 120, 130, 132+

**AREA 2  MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING**

(1 course, 3 semester/4-5 quarter units)  
Mathematics 100, 112+, 114+, 115, 116+, 150+, 170+, 190, 220, 240  
Psychology 210+

**AREA 3  ARTS AND HUMANITIES**

(3 courses, with at least one from A and one from B below; 9 semester/12-15 quarter units)

A) Arts  
Architecture 112  
Humanities *108, *109  
Music 100, 101, 103, 104, 104B, 105  
Photography 160  
Physical Education 191  
Theatre 101, 102, 103, 104, 150, 159

B) Humanities  
Art *108, *109  
French 201, 202  
German 102, 201, 202  
Humanities 100, *108, *109  
Japanese 102  
Philosophy 100, 102, 104, 200, 201, 204, 206  
Sign Language 201  
Spanish 102+, 112+, 201, 202, 210  
Women's Studies 102

**AREA 4  SOCIAL AND BEHAVIORAL SCIENCES**

(3 courses from at least two disciplines or an interdisciplinary sequence; 9 semester/12-15 quarter units)

Anthropology 100, 120, 170, 200  
Economics 101+, 102, 201, 202

**AREA 5  PHYSICAL AND BIOLOGICAL SCIENCES**
(2 courses, one from A and one from B below; at least one course must include laboratory (lab); 7-9 semester/9-12 quarter units)

A) Physical Sciences
- Astronomy 101, 102+, 103+, 104, 105L(lab), 106
- Chemistry 100+ (lab), 110+ (lab), 111 (lab), 112 (lab)
- Earth Science 101, 101L (lab), 104, 110+ (lab)
- Geography 101, 101L (lab)
- Geology 101+ (lab), 110+, 201 (lab), 207 (lab), 209 (Lab)
- Physical Science 100+
- Physics 100+ (lab), 101+ (lab), 102+ (lab), 201+ (lab), 202+ (lab), 203+ (lab)

B) Biological/Life Sciences
- Anatomy and Physiology 120+ (lab), 130+ (lab), 150+ (lab), 151+ (lab), 200+ (lab), 201+ (lab)
- Anthropology 115
- Biology 115 (lab), 120+ (lab), 200 (lab), 201 (lab)
- Botany 120 (lab)
- Microbiology 200 (lab)
- Psychology 241
- Zoology 120 (lab)

ADDITIONAL REQUIREMENTS

A) UC ONLY: Language other than English
There are several ways to satisfy this requirement. They include:
a) Complete two years of the same foreign language in high school with a grade of “C” or better.
b) Complete first college course in any foreign language, or Sign Language 101.
c) Earn a minimum score of 500 on an appropriate College Board Achievement Test in a foreign language.
d) For other options, see your counselor.

B) CSU ONLY: The CSU has a specific American Institutions requirement that is separate from the general education requirements. Courses used to meet the American Institutions requirement may NOT be used to satisfy requirements for the IGETC. It is recommended that this requirement be met prior to transfer. The following will meet the CSU American Institutions requirement.
- 6 units, one course from Group 1 and one course from Group 2.
  Group 1: History 101+, 102+, 103+
  Group 2: Political Science 101+, 201+

C) The UC-bound student should be aware of the American history and institutions requirements at the campus of choice. Requirements do vary. See your counselor for details.

+Credit limitation. UC credit limitations may apply for certain courses in IGETC, as well as other UC transferable courses which are not in IGETC. An explanation for each course which has credit limitations appears in the college catalog course description. See a counselor for details.
Weekend College (Formerly PACE)

Working adults now have the opportunity to fast forward their undergraduate degree with Cerritos Weekend College. With the Weekend College, students can earn a Liberal Arts degree in as few as three years.

Enrolled in on-campus cohorts, groups of 20 to 25 colleagues work together, support each other and finally, graduate together. The Weekend College cohort structure works to motivate each adult student through the completion of a degree. While the traditional semester lasts for 18 weeks, you can complete most Weekend College classes in nine-week modules.

Weekend College at Cerritos College is the perfect solution for you to start or continue your college education and still maintain a healthy balance between home, work, and school. Weekend College classes offer a dynamic learning environment geared to adult students.

HIGHLIGHTS OF OUR PROGRAM

• Take courses on Friday evenings and all day Saturday only
• Enhance your career skills
• Earn your Associate Degree
• Prepare to transfer in only six semesters and two summer sessions.
• Complete the program in a supportive environment
• Learn to succeed in Online Education
• Envision your personal and professional success
• Make earning your B.A. degree a reality
• Tutoring & Other Support Services available

If you are interested in enrolling in the Weekend College, please contact (562) 860-2451, ext. 2405.
COMMUNITY EDUCATION

The Community Education programs carry out the concept of lifelong learning in the general population. Community Education provides classes, activities, workshops and programs to meet the varied needs of our diverse community, from the very young in the College for Children and Young Scholars programs to our seniors in the Emeritus program. All Community Education courses-career development, work force training and retraining, cultural enrichment, and civic literacy—are educational; their overall goal is to impart knowledge and develop skills. The College provides participants with access to quality programs in a format that blends education with work and leisure throughout life.

Here are just a few of the many exciting learning opportunities Community Education offers to enhance your abilities and expand your horizons. Whatever your interests, we believe you will discover a class, an activity, a workshop or a program to meet your needs.

COMMUNITY EDUCATION

Here are just a few of the many exciting learning opportunities Community Education offers to enhance your abilities and expand your horizons. Whatever your interests, we believe you will discover a class, an activity, a workshop or a program to meet your needs.

OFFICE OF ECONOMIC DEVELOPMENT

The Office of Economic Development (OED) has been established by Cerritos Community College to meet the specific educational needs of business and industry. The OED provides quality controlled, customized programs and services that go beyond the traditional academic curriculum. All programs and services are developed with input from the corporate client and can be provided at the work-site or on campus at times convenient to the program participants.

The OED serves numerous local companies, among them, aerospace companies, banking institutions, health care agencies, utility and public work companies, communication firms, hotels, restaurants, supermarkets and others.

Services and programs provided by the OED include management training, high-tech training, leadership development, computer technology, banking and finance training, executive fitness training, language training, as well as seminars, conferences and forums on current business issues and concerns. Consultant and technical assistance services are available to work with businesses in developing any program that is not already offered.

For further information please call the Office of Economic Development at (562) 860-2451, extension 2510.

APPLIED TECHNOLOGY EDUCATION CENTER (ATEC)

The Applied Technology Education Center (ATEC) at Cerritos College offers fee-based, short-term courses and programs designed for serious technology users at all levels, and brings together professional information technology and a state-of-the-art facility to meet the stringent training demands of today's high-tech environment. From desktop applications training to networking certification programs, ATEC provides the right learning environment for professionals requiring information technology training.

ATEC’s comprehensive courses in popular desktop applications take participants step-by-step through the process of proficiency in applications including: operating systems, presentation packages, desktop office management, web site development, spreadsheet development, word processing and database management.

For more information or course schedules, contact ATEC at 562/467-5050, extension 2511.

EDUCATION — Bringing it all together for Business!

SEMINARS FOR PROFESSIONALS/CERTIFICATE OF COMPLETION


For specific information regarding these programs, call Community Education (562) 467-5050, extension 2521.

ADULT EDUCATION/DIVERSITY PROGRAMS

Adult Education and Diversity Programs provide educational opportunities that address the unique needs of adults in the region. Adult Education courses are noncredit, open entry, open exit, and have No Registration Fees. Adult Education Courses include categories such as:

- English as a Second Language
- Vocation English as a Second Language
- Parenting
- Elementary and Secondary Basic Skills
- Courses for Immigrants
- Educational Programs for Persons with Disabilities
- Short-term Vocational Programs
- Educational Programs for Older Adults

Emeritus courses are designed to meet the special needs of older adults. Emeritus courses are noncredit, open entry, open exit, and have No Registration Fees. Emeritus courses include:

- Senior Exercise
- Massage
- Arts & Crafts
- Quilting
- Harmony Chorus, Community Chorus
- Creative Writing

Cerritos College Adult Education programs also provide access and opportunities for Adult Education students to enter credit, orientation, and vocational college programs.

Services include one-stop registration, assessment and counseling. For more information call (562)467-5098.

To learn about specific classes and programs offered, read the Calendar of Events. The Calendar contains a complete listing of class offerings, registration procedures and other important information. Look for your Calendar of Events in your mail or call the office for a free copy.

REGISTRATION FOR CLASSES IS ALWAYS SIMPLE

Walk-In Come to the Community Education Building located in the far south-west corner of the campus, north of New Falcon Way
Phone In (562) 467-5050. Have your VISA or MASTERCARD number ready for fee-based courses
Mail In Use the registration form in the Calendar of Events
Fax In For fee-based courses use our fax number (562) 467-5013 Register 24 hours, seven days a week
In Person Monday - Thursday 8 a.m.-7:30 p.m.
Friday 8 a.m.-4:30 p.m.
Saturday 8 a.m.- noon.
Cerritos College Foundation

The Cerritos College Foundation, a non-profit organization organized in 1979, serves as a charitable vehicle for the community, individuals and alumni, to assist with financial support to Cerritos College beyond that which cannot be met through state funding. It is the belief of the Foundation that the growth of Cerritos College must be fostered and supported for the institution to keep its rightful place as one of the finest community colleges in California and in the nation.

The Foundation’s commitment is to cultivate and solicit private financial support for the faculty staff and programs of Cerritos College whose goal is to continue the tradition of producing high-caliber professionals, leaders and artisans who enrich our community. We are committed to strengthening the pursuit of quality education while meeting the diverse needs of the students and community. The Foundation offers a variety of scholarships in various disciplines to assist students in their educational pursuits.

Over 25 community leaders volunteer generously of their time, talent and resources to support Cerritos College and its students by serving on the Foundation Board of Directors.

We invite you to visit our web-site at www.cerritos.edu/ccf or you may contact the Foundation Office at (562) 860-2451, ext. 2526 for more information or to make a donation.
CURRICULA, REQUIREMENTS FOR MAJORS, CERTIFICATES AND TRANSFER PROGRAMS
CERTIFICATE OF ACHIEVEMENT

Cerritos college is authorized to award a Certificate of Achievement to any student who satisfactorily completes an organized curricula designed for a specific occupational goal. In order to obtain a Certificate, a student must satisfy the following requirements:

1. Complete the course requirements for the chosen program of study as detailed in the “Programs of Study” section of this catalog.
2. Maintain a minimum grade point average of “C” (2.0) in all required courses, including a GPA of 2.0 for all departmental courses specified, as well as a 2.0 for all course outside the major designated as requirements in the curriculum pattern.
3. A minimum of twelve (12) units of course work within the certificate must be taken at Cerritos College if Certificate of Achievement is to be awarded by this institution.
4. Upon completion of required course work, file a “Petition for Certificate of Achievement” form. The petitions are available in the Counseling Center.
5. Units earned toward the Certificate of Achievement may be applied toward an Associate in Arts Degree.
6. Credit toward the Certificate of Achievement is not granted for classes taken as part of the Adult Education Program.

CERTIFICATE OF COMPLETION

Locally approved certificate program may consist of one or more courses totaling 17 units that lead to an occupationally relevant set of skills.

ADMINISTRATION OF JUSTICE

ASSOCIATE IN ARTS DEGREE

The following Administration of Justice Associate in Arts Degree program meets guidelines established by the California Community Colleges’ Chancellor’s Office.

Six units of elective, non-transferable Administration of Justice credit may be granted to employed peace officers that have completed a basic P.O.S.T. academy.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete a minimum of 60 units, including: (1) the Administration of Justice Core and Department requirements, (2) A.A. degree general education requirements, and (3) additional elective courses as needed.

ADMINISTRATION OF JUSTICE CORE

REQUIRED (21 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 91</td>
<td>Report Writing Procedures</td>
<td>3</td>
</tr>
<tr>
<td>AJ 101</td>
<td>Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>AJ 102</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>AJ 103</td>
<td>Criminal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>AJ 104</td>
<td>Criminal Evidence</td>
<td>3</td>
</tr>
<tr>
<td>AJ 105</td>
<td>Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>AJ 202</td>
<td>Substantive Law</td>
<td>3</td>
</tr>
</tbody>
</table>

DEPARTMENT REQUIREMENTS

REQUIRED (12 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 110</td>
<td>Concepts of Enforcement Services</td>
<td>3</td>
</tr>
<tr>
<td>AJ 220</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 261</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 201</td>
<td>Introductory Sociology: Social Problems</td>
<td>(3)</td>
</tr>
</tbody>
</table>

ELECTIVE GROUP

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 51</td>
<td>Firearm</td>
<td>1</td>
</tr>
<tr>
<td>AJ 52</td>
<td>Advanced Firearms</td>
<td>1</td>
</tr>
<tr>
<td>AJ 61</td>
<td>Defense Tactics</td>
<td>1</td>
</tr>
<tr>
<td>AJ 62</td>
<td>Advanced Defense Tactics</td>
<td>1</td>
</tr>
<tr>
<td>AJ 71</td>
<td>First Aid (AJ)</td>
<td>2</td>
</tr>
<tr>
<td>AJ 130</td>
<td>Traffic Control and Investigation</td>
<td>3</td>
</tr>
<tr>
<td>AJ 150</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>AJ 173</td>
<td>A.J. Occupational Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>AJ 180</td>
<td>Introduction to Security</td>
<td>3</td>
</tr>
<tr>
<td>AJ 208</td>
<td>Special Issues in Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>AJ 221</td>
<td>Narcotics and Vice Control</td>
<td>3</td>
</tr>
<tr>
<td>AJ 222</td>
<td>Juvenile Procedures</td>
<td>3</td>
</tr>
<tr>
<td>AJ 298</td>
<td>Directed Studies</td>
<td>1</td>
</tr>
<tr>
<td>AJ 299</td>
<td>Directed Studies</td>
<td>2</td>
</tr>
<tr>
<td>BCOT 131</td>
<td>Beginning Typing (Recommended)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 223</td>
<td>Spanish for Careers</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 101</td>
<td>Beginning Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 100</td>
<td>Introductory Photography</td>
<td>3</td>
</tr>
<tr>
<td>BL 100</td>
<td>Introduction to California Civil Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BL 101</td>
<td>Introduction to Law</td>
<td>3</td>
</tr>
<tr>
<td>BL 103</td>
<td>Legal Research</td>
<td>3</td>
</tr>
</tbody>
</table>

CAREER OPPORTUNITIES: Upon completion of the Administration of Justice Associate in Arts Degree program, employment in various positions in the criminal justice system is available, including police officer, deputy sheriff, correctional officer, investigator, etc. Civil service regulations and state laws govern the appointment of public law enforcement officers. Eligibility depends on performance in competitive exams in addition to education and experience. The positions have rigorous physical,
psychological and integrity requirements. Employment is further conditioned on completion of a satisfactory background investigation. Completion of the Baccalaureate transfer program provides the educational potential for advancement to supervisory and management positions or entry to graduate studies or law school.

See Cerritos College Graduation Requirements.

**ADMINISTRATION OF JUSTICE TRANSFER PROGRAM**

**LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University – Dominguez Hills**
- CIS 101 Introduction to Computer Information Systems: 3 units
- MATH 115 Finite Mathematics: 4 units

**California State University-Fullerton**
- All classes for the major are upper division and are taken at CSUF. See a counselor for recommended lower division electives.

**California State University-Long Beach**
- AJ 101 Introduction to Administration of Justice: 3 units
- AJ 102 Concepts of Criminal Law: 3 units

The Bachelor of Science in Criminal Justice program is impacted. The CSU designates major programs as impacted when more applications are received in the initial filing period from CSU eligible applicants than can be accommodated by the campus. Impacted majors are authorized to use supplementary admission criteria and/or higher admission standards than the CSU minimum requirements in considering applicants to the program. These criteria are applied equally to continuing CSULB students and entering upper-division transfer students. Please refer to the admissions web site for impaction admission details: [http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html](http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html)

**California State University-Los Angeles**
- AJ 101 Introduction to Administration of Justice: 3 units
- AJ 102 Concepts of Criminal Law: 3 units
- AJ 202 Substantive Law: 3 units
- OR BH 110 Soils: 4 units
- OR BH 140 Plant Propagation: 3 units

Students are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet the graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

Recommended electives for any of the above universities, for this major are:

- AJ 102 Introduction to Administration of Justice: 3 units
- AJ 103 Criminal Procedure: 3 units
- AJ 104 Criminal Evidence: 3 units
- AJ 105 Community Relations: 3 units
- AJ 202 Substantive Law: 3 units
- PSYC 101 General Introductory Psychology: 3 units
- SOC 101 Introductory Sociology Principles: 3 units

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

The completion of 60 units, including 18 units of the above AJ requirements (AJ 101, 102, 103, 104, 105 and 202) and the Associate in Arts General Education Requirements, qualifies the student for the A.A. degree in Administration of Justice.

**CAREER OPPORTUNITIES:** For those persons seeking employment in law enforcement at the A.A. level of preparation, many opportunities exist in the various federal, state, municipal and county criminal justice agencies. A wider variety of employment opportunities exist for those who hold a Bachelor’s degree (e.g. administration) and/or Masters degree (e.g. teaching, research, administration, etc.)

**AGRICULTURE TRANSFER PROGRAM**

**COMMON LOWER DIVISION PREPARATION FOR CALIFORNIA STATE UNIVERSITY**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>5</td>
</tr>
<tr>
<td>MATH 112</td>
<td>4</td>
</tr>
</tbody>
</table>

**California State University - Pomona**

In addition to the above:

- BIOL 200 Principles of Biology: 5 units
- ORNH 110 Soils: 4 units
- ORNH 140 Plant Propagation: 3 units

California State University and Colleges that offer the Bachelor’s Degree: Chico, Pomona, Fresno, San Luis Obispo, Stanislaus.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete 60 units to include: (1) the lower division preparation, (2) electives as needed, and (3) the Associate in Arts Degree General Education requirements.

**CAREER OPPORTUNITIES:** Programs with an emphasis in Agriculture are designed for agriculturally-related occupations in business, industry, specialized services, education, conservation, recreation and production. Many careers unknown a few years ago have expanded with mechanization to meet food needs.

See Cerritos College Graduation Requirements. See State University General Education list.

**ANTHROPOLOGY TRANSFER PROGRAM**

**COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 115</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 120</td>
<td>3</td>
</tr>
</tbody>
</table>

**COMMON LOWER DIVISION PREPARATION UNITS**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100 Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 115 Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 120 Intro to Archeology</td>
<td>3</td>
</tr>
</tbody>
</table>

62
ADDITIONAL LOWER DIVISION RECOMMENDED COURSES FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Los Angeles

ANTH 100  Cultural Anthropology 3
ANTH 115  Physical Anthropology 3
ENGL 103  Critical and Argumentative Writing 3

A modern foreign language (101 and 102 level) or successful completion of 3 years of high school foreign language, or a designated upper-division course in linguistics is required.

University of California – Irvine

In addition to the common core above, select two Anthropology courses below:

ANTH 200  Native Peoples of North America 3
ANTH 201  Native Peoples of California 3
ANTH 202  The Maya, Inca and Aztecs: Ancient Civilizations of the Americas 3
CIS 101  Introduction to Computer Information Systems 3
MATH 170  Analytic Geometry and Calculus I 4
PSYCH 210  Elementary Statistics (4)
MATH 112  Elementary Statistics 4

University of California – Los Angeles

UCLA offers a B.A. and a B.S. in Anthropology. See a counselor for the B.S. requirements.

University of California – Riverside

ENGL 106  Introduction to Language Study 3
PHIL 106  Introduction to Logic 3
PSYC 220  Research Methods 4

UCR offers a B.A. and B.S. in Anthropology. A B.A. in Anthropology/Law and Society is also available; see a counselor for additional requirements.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

ANTH 100  Cultural Anthropology 3
ANTH 115  Physical Anthropology 3
ANTH 120  Introduction to Archaeology 3
ANTH 170  Introduction to Language and Culture 3

Choose from the following any (2) as electives for a total of 18 units:

ANTH 200  Native Peoples of North America 3
ANTH 201  Native Peoples of California 3
ANTH 202  The Maya, Inca & Aztecs: Ancient Civilization of the Americas 3
ANTH 203  The Anthropology of Music, Witchcraft and Religion 3
ANTH 205  The Anthropology of Sexuality and Gender 3
ANTH 250  Introduction to Field Archaeology 3

CAREER OPPORTUNITIES: Employment for the person holding an M.A. or Ph.D in Anthropology is good. Usual placements are chiefly in colleges and universities and also in museums, national parks, and in technical aid programs. Persons holding the B.A. may pursue applied careers in research, education, government, cultural research management, business and Social Service. A person interested in teaching can use Anthropology as a teaching Minor.

See Cerritos College Graduation Requirements.
See State University General Education List.

ARCHITECTURAL TECHNOLOGY ASSOCIATE IN ARTS DEGREE PROGRAM

REQUIRED COURSES

ARCH 110  Introduction to Architecture and Environmental Design 3
ARCH 111  Architectural Drafting and Design I 3
ARCH 112  History of Architecture 3
ARCH 113  Building Codes 4
ARCH 121  Architectural Drafting and Design II 3
ARCH 123  Introduction to Computer Aided Drafting for Architecture 4
ARCH 212  Architectural Design Theory I 3
ARCH 213  Advanced Applications of Computer Aided Drafting for Architecture 4
ARCH 221  Working Drawing/Architectural Desktop 4
ART 110  Freehand Drawing 3

TOTAL CERTIFICATE UNITS 34

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) the above course requirements, (2) the A.A. Degree general education requirements, and (3) electives as needed.

RECOMMENDED ELECTIVES: ART 185, BA 100, BUSR 101, ENGT 255, PSYC 101.


See Cerritos College Graduation Requirements.

ARCHITECTURE TRANSFER PROGRAM

COMMON LOWER DIVISION (CORE) REQUIREMENTS

ARCH 111  Architectural Drawing 3
ECON 201  Principles of Macroeconomics 3
either ECON 202  Principles of Microeconomics (3)
ENGL 102  Composition and Literature 3
either ENGL 103  Critical and Argumentative Writing (3)
MATH 120  Trigonometry 3

Additional Lower Division Recommended Courses For Specific Transfer Institutions

California State Polytechnic University – Pomona

ARCH 121  Materials and Methods of Building Construction 3
ARCH 122  Architectural Delineation 2
ARCH 211  Architectural Drawing, Programming and Presentation 3
ARCH 212  Architectural Design Theory I 3
ARCH 222  Architectural Design Theory II 3
PHYS 101  General Physics 4
California State Polytechnic University – San Luis Obispo
ARCH 110 Introduction to Architecture and Environmental Design 3
ARCH 113 Building Codes 4
ARCH 121 Materials and Methods of Building Construction 3
MATH 170 Analytic Geometry and Calculus I 4
PHYS 101 General Physics 4
PHYS 102 General Physics 4
PHYS 201 Engineering Physics (4)
PHYS 203 Engineering Physics (4)

University of California – Berkeley
ARCH 110 Introduction to Architecture and Environmental Design 3
ARCH 112 History of Architecture (3)
ARCH 212 Architectural Design Theory I 3
ART 110 Freehand Drawing 3
ART 120 Two-Dimensional Design 3
ART 121 Three-Dimensional Design 3
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 201 Engineering Physics 4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete the 60 units to include (1) The Common Lower Division Requirements, (2) ARCH 212, 222, (3) 9 units of Architectural Electives, (4) The Associate in Arts general education degree requirements.

See Cerritos College Graduation Requirements.
See State University General Education List.

ART AND DESIGN
LETTERING ARTS
CERTIFICATE OF COMPLETION

REQUIRED COURSES
ART 180 Calligraphy I – Basic Roman Letterforms 3
ART 181 Calligraphy II – Basic Italic Letterforms 3
ART 287A Letter Arts I - Uncial and Gothic Letterforms 2
ART 287B Roman Calligraphy 2
ART 183A Commercial Brush Lettering 1
ART 183B Copperplate Calligraphy 1

Total certificate requirements 12

Although some of these courses are transferable, this certificate is non-transferable.

The Lettering Arts Certificate of Completion is designed to include the following objectives:

a) To gain proficiency in calligraphy using traditional lettering techniques
b) To develop knowledge of the history of lettering
c) To explore various historic styles of lettering
d) To develop confidence and a personal style of lettering
e) To help the participant create a letter arts business plan

A Certificate of Completion in the Lettering Arts Certificate will be granted upon completion of 12 units.
GRAPHIC DESIGN
ART 180 Calligraphy 3
ART 181 Calligraphy II 3
ART 182B Lettering and Typography II 3
ART 185 Rendering I 3
ART 285 Rendering II 3
BA 110 Advertising 3
PHOTO 100 Introductory Photography 3

MULTIMEDIA DESIGN
PHOTO 100 Introductory Photography 3
PHOTO 102 Intermediate Photography 3
PHOTO 112 Intermediate Digital Photography 3
ART 184 Graphic Design I 3
CIS 103 Computer Programming Logic 3.5
CIS 205 Programming in HTML for the World Wide Web 1.5

PRINTMAKING
ART 218 Screenprinting 3
ART 219 Advanced Etching 3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete a minimum of 60 units to include: (1) Above art courses and units requirements, (2) AA Degree general education requirements and (3) electives as needed.

CAREER OPPORTUNITIES: Self-employed artist/craftsman; designer; jeweler; potter; printmaker; freehand illustrator; letterer; commercial artist: paste-up, sketch, layout; private studio; gallery museum worker; art supplies sales.

See Cerritos College Graduation Requirements.

MOTION GRAPHICS
CERTIFICATE OF ACHIEVEMENT

REQUIRED COURSES
ART101 Appreciation and History 3
or ART 103 Modern and Contemporary Appreciation (3)
ART 110 Freehand Drawing 3
ART 112 Life Drawing 3
ART 114 Storyboard and Graphic Novel Illustration 3
ART 120 Two Dimensional Design 3
ART 121 Three Dimensional Design 3
ART 182A Lettering and Typography I 3
ART 182B Lettering and Typography II 3
ART 190 Animation Principles 3
ART 198 Motion Graphics 3
MUS 244 Digital Audio Production 3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete requirements for a Certificate of Achievement in Motion Graphics. For an A.A. Degree, a student must also take 6 units selected from the following courses: ART 192, ART 194, ART 196, TH 156 and general education requirements to achieve a minimum of 60 units.

DIGITAL ARTS
ASSOCIATE IN ARTS DEGREE

REQUIRED COURSES

Core Requirements (21 units)
ART 101 Appreciation and History 3
or ART 103 Modern and Contemporary Appreciation (3)
ART 110 Freehand Drawing 3
ART 112 Life Drawing 3
ART 114 Storyboard and Graphic Novel Illustration 3
ART 120 Two Dimensional Design 3
ART 121 Three Dimensional Design 3
ART 190 Animation Principles 3

Completion of all courses (12 units) in either the Motion Graphics Emphasis or the Computer Animation Emphasis as listed below:

MOTION GRAPHIC EMPHASIS
ART 182A Lettering and Typography I 3
ART 182B Lettering and Typography II 3
ART 198 Motion Graphics 3
MUS 244 Digital Audio Production 3

COMPUTER ANIMATION EMPHASIS
ENGL 240 Creative Writing 3
ART 191 3D Character Animation 3
ART 195 3D Computer Modeling 3
MUS 244 Digital Audio Production 3
or ART 193 Motion Picture Editing 3

Choose from the following any (2) courses for a total of 6 units:
TH 156 Video Production 3
ART 192 Photoshop/Digital Imaging 3
ART 194 Multimedia Design 3
ART 196 Web Design with Flash and Dreamweaver 3
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete (1) core requirements, (2) all courses in the Motion Graphics Emphasis or the Computer Animation Emphasis, (3) two courses from the list above, and (4) the Associate in Arts Degree general education requirements.

DIGITAL LAYOUT FOUNDATION
CERTIFICATE OF COMPLETION

REQUIRED COURSES UNITS
ART 186 Computer Graphics in Art and Design 3
ART 188 Design for Desktop Publishing 3

TOTAL CERTIFICATE OF COMPLETION REQUIREMENTS 6

NOTE: Both courses are transferable but this verification is non-transferable.

The Digital Layout Foundation Certificate of Completion is designed to include the following objectives: a) to explore various text layout design problems b) to develop knowledge of digital typesetting c) to explore various digital illustration techniques d) to gain proficiency in desktop publishing applications e) to help the participant update software skills.

A Certificate of Completion in the Digital Layout Foundation Certificate will be granted by the division upon completion of 6 units.

3D ANIMATION FOUNDATION
CERTIFICATE OF COMPLETION

REQUIRED COURSES UNITS
ART 195 Modeling for Animation 3
ART 191A 3D Computer Animation 3

TOTAL CERTIFICATE OF COMPLETION REQUIREMENTS 6

NOTE: Both courses are transferable but this verification is non-transferable.

The 3D Animation Foundation Certificate of Completion is designed to include the following objectives: a) to develop fundamental 3D Computer modeling skills b) to explore traditional animation principles and apply them to digital animation c) to create original 3D models with Photographic texture maps d) to create animated short films e) to help the participant update software skills.

A Certificate of Completion in the 3D Animation Foundation Certificate will be granted by the division upon completion of 6 units.

DIGITAL GRAPHICS FOUNDATION
CERTIFICATE OF COMPLETION

REQUIRED COURSES UNITS
ART 186 Computer Graphics in Art and Design 3
ART 192 Photoshop/Digital Imaging 3

TOTAL CERTIFICATE OF COMPLETION REQUIREMENTS 6

NOTE: Both courses are transferable but this verification is non-transferable.

The 3D Animation Foundation Certificate of Completion is designed to include the following objectives: a) to gain proficiency in vector and bitmap graphic applications b) to develop knowledge of digital photographic manipulation c) to explore various digital illustration techniques d) to develop confidence in digital imaging e) to help the participant update software skills.

A Certificate of Completion in the Digital Graphics Foundation will be granted by the division upon completion of 6 units.

ART AND DESIGN
TRANSFER PROGRAM

LOWER DIVISION REQUIREMENTS
FOR SPECIFIC CALIFORNIA STATE UNIVERSITIES UNITS

California State University – Dominguez Hills
ART 101 Appreciation and History 3
ART 102 Appreciation and History 3
ART 103 Modern and Contemporary Appreciation 3
ART 120 Two-Dimensional Design 3
ART 121 Three-Dimensional Design 3

California State University – Fullerton
ART 101 Appreciation and History 3
ART 102 Appreciation and History 3
ART 110* Freehand Drawing 3
or ART 111* Intermediate Freehand Drawing (3)
ART 112 Life Drawing 3
or ART 213 Intermediate Life Drawing (3)
ART 120* Two-Dimensional Design 3
ART 121* Three-Dimensional Design 3
ART 130B* Fundamentals of Painting 3

*Course must be completed with B or better to receive Bachelors of Fine Arts in Art

Available Concentrations: Art History; General Studio Art; Teaching (single subject instruction); Ceramics; Crafts; Creative Photography; Drawing and Painting; Entertainment Art/Animation; Graphic Design; Illustration; Printmaking; and Sculpture. The above requirements are core requirements only. See a counselor for additional major requirements for specific Art options.

California State University – Long Beach
ART 101 Appreciation and History 3
ART 102 Appreciation and History 3
ART 110* Freehand Drawing 3
or ART 111* Intermediate Freehand Drawing (3)
ART 112** Life Drawing 3
or ART 160 3-D Media (3)
ART 120 Two-Dimensional Design 3
ART 121 Three-Dimensional Design 3
ART 130A+ Fundamentals of Painting 3
or ART 136 Painting for Art Majors (3)
ART 150* Introduction to Ceramics 3

*This course is not required for the Art History, Illustration, Graphic Design and Printmaking options.
** This course can be substituted with Art 160 for 3-D media, Art Photography, and Ceramics
+ This course is not required for the Art Photography class, take ART 186 instead.
Available Options: Art History; Art Education (single subject instruction); Art Photography; Ceramics; Drawing and Painting; Illustration; 3-D Fiber Media; Printmaking; Sculpture, Studio Art, Graphic Design, Interior and Industrial design (note: major requirements are different then above. Please see a counselor for more information).

The above requirements are for the art major only. See a counselor for additional major requirements for specific Art options. The Bachelor of Fine Arts is impacted. Some Art options require a supplemental application and portfolio for admissions. Please see CSULB catalog or an Art counselor.

California State University – Los Angeles
ART 101 Appreciation and History 3
ART 102 Appreciation and History 3
ART 110 Freehand Drawing 3
ART 120 Two-Dimensional Design 3
ART 121 Modern and Contemporary Appreciation 3

Available Options: Animation (Traditional and Computer Track); Design; Art Education; Art History; Fashion and Textiles; and Studio Arts. The above requirements are Art core courses only. Please see counselor for additional major requirements within the specific art options.

Students are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet a graduation requirement at CSULA as their prerequisite for their writing proficiency requirement.

LOWER DIVISION REQUIREMENTS FOR SPECIFIC CAMPUSES OF THE UNIVERSITY OF CALIFORNIA

University of California – Irvine
Two courses from:
ART 101 Appreciation and History 3
ART 102 Appreciation and History 3
ART 103 Modern and Contemporary Appreciation 3

Choose from the following any (4) courses:
ART 110 Freehand Drawing 3
or ART 111 Intermediate Freehand Drawing 3
ART 130A Fundamentals of Painting 3
or ART 136 Painting for Art Majors 3
or ART 162 Introduction to Sculpture 3
or ART 163 The Techniques of Sculpture 3
ART 155 Beginning Ceramic Sculpture 3
or ART 255 Intermediate Ceramic Sculpture 3

University of California – Los Angeles
ART 103 Modern and Contemporary Appreciation 3
ART 110 Freehand Drawing 3
ART 130A Fundamentals of Painting 3
ART 162 Introduction to Sculpture 3
PHOT 100 Introductory Photography 3

Choose from the following any (1) courses:
ART 101 Appreciation and History 3
or ART 102 Appreciation and History 3
or ART 105 Women Artists 3
or ART 100 Introduction to World Art 3
or ART 107 Asian Art History 3

Note: supplemental application, statement of interest and goals, and portfolio (of five slides) are required.

University of California – Riverside
ART 110 Freehand Drawing 3
ART 130A Fundamentals of Painting 3
or ART 136 Painting for Art Majors 3
PHOT 100 Introductory Photography 3
and PHOT 160 History of Photography 3

Choose from the following any (1) courses:
ART 101 Appreciation and History 3
or ART 102 Appreciation and History 3
and ART 103 Modern and Contemporary Appreciation 3

Additional Art classes should be selected according to the student's art emphasis at the transfer institution. Contact a Cerritos College Fine Arts Counselor for specific requirements for the school and option selected in order to optimize preparation to transfer.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the following: (1) Above transfer requirements, (2) the AA Degree general Education requirements, and (3) electives to achieve a minimum of 60 units.

ARTS CAREER OPPORTUNITIES: Self-employed artist/craftsman designer, printmaker, potter, freehand illustrators, private studio, gallery museum or display worker, and curator, art supplies sales, studio or art history instructor, art consultant.

GRAPHIC DESIGN/MULTIMEDIA DESIGN CAREER OPPORTUNITIES: The Graphic Design track prepares students for careers in the fields of graphic design and desktop publishing. The Multimedia track focuses on electronic media including multimedia and web design.

AUTOMOTIVE COLLISION REPAIR (AUTOBODY TECHNICIAN)

CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 51</td>
<td>Non-Structural Damage Repair</td>
<td>4.5</td>
</tr>
<tr>
<td>or AB 50A</td>
<td>Body Trim &amp; Minor Repairs</td>
<td>1</td>
</tr>
<tr>
<td>AB 50B</td>
<td>Panel Replacement</td>
<td>1</td>
</tr>
<tr>
<td>and AB 50C</td>
<td>Structural Repair Setup</td>
<td>1</td>
</tr>
<tr>
<td>AB 52</td>
<td>Structural Damage Repair</td>
<td>4.5</td>
</tr>
<tr>
<td>AB 53</td>
<td>Suspension, Alignment &amp; Power Train</td>
<td>4.5</td>
</tr>
<tr>
<td>AB 54</td>
<td>Advanced Design Automotive Panel Repair</td>
<td>4.5</td>
</tr>
<tr>
<td>AB 55</td>
<td>Structural Panel Replacement</td>
<td>4.5</td>
</tr>
<tr>
<td>AB 56</td>
<td>Non-Structural Automotive Welding</td>
<td>2</td>
</tr>
<tr>
<td>AB 57</td>
<td>Structural Automotive Welding</td>
<td>2</td>
</tr>
<tr>
<td>AB 61</td>
<td>Preparation and Spot Refinishing</td>
<td>4.5</td>
</tr>
<tr>
<td>or AB 60A</td>
<td>Sanding &amp; Paint Prep</td>
<td>1</td>
</tr>
<tr>
<td>AB 60B</td>
<td>Mix &amp; Apply Paint</td>
<td>1</td>
</tr>
<tr>
<td>and AB 60C</td>
<td>Paint Defects-Causes &amp; Cures</td>
<td>1</td>
</tr>
<tr>
<td>AB 86</td>
<td>Production Management</td>
<td>2</td>
</tr>
<tr>
<td>AB 181</td>
<td>Non-Structural Damage Estimating</td>
<td>3</td>
</tr>
<tr>
<td>or AB 80A</td>
<td>Vehicle Staging</td>
<td>1</td>
</tr>
<tr>
<td>AB 80B</td>
<td>Damage Analysis &amp; Auto Systems</td>
<td>1</td>
</tr>
<tr>
<td>and AB 80C</td>
<td>Vehicle Types &amp; Auto Systems</td>
<td>1</td>
</tr>
<tr>
<td>or AB 99A</td>
<td>Computer Measuring Training</td>
<td>1</td>
</tr>
<tr>
<td>AB 99B</td>
<td>Unitized Analysis and Repair Planning</td>
<td>1</td>
</tr>
<tr>
<td>AB 99C</td>
<td>Full-Frame Analysis and Repair Planning</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENT 36(33)

CAREER OPPORTUNITIES: This program prepares the student with entry-level knowledge and skills in automotive collision repair including body and frame repair technician, apprentice body and frame repair technician and shop foreman.
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for your chosen Certificate (listed above) plus completes such electives and general education requirements including TM 50 to achieve a minimum of 60 units.
AB 51, AB 56 and AB 57 may be substituted for I-CAR Welding Qualification Test Certification plus 9 units of AB 73 Work Experience.

See Cerritos College Graduation Requirements.

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY CERTIFICATES OF ACHIEVEMENT

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY-GENERAL TECHNICIAN

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 110</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 120</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 130</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 150</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 160</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 260</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY-ELECTRICAL/DIAGNOSIS TECHNICIAN

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 110</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 160</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 170</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 180</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 260</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 280</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 281</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

AUTOMOTIVE MECHANICAL REPAIR ENGINE/MACHINING TECHNOLOGY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 110</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 210</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 211</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 212</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY-MANUFACTURE SPECIALTY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 73</td>
<td>15</td>
</tr>
<tr>
<td>AUTO 111</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 121</td>
<td>6</td>
</tr>
<tr>
<td>AUTO 151</td>
<td>6</td>
</tr>
<tr>
<td>AUTO 161</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 179</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 181</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>48</strong></td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
The completion of 60 units to include 1) courses for completion of an Automotive Certificate option, 2) General Education course requirements to include Technical Math 50, and 3) electives as needed.

RECOMMENDED ELECTIVES: Weld 100, Met 100A, MTT 100, BCOM 147, BCOM 148, MFGT 100, TM 50.

CAREER OPPORTUNITIES: General Auto Mechanic, Parts Clerk, Mechanical and Auto Agencies or Commercial Fleets, and a variety of automotive specialties.

See Cerritos College Graduation Requirements.

BIOLOGY TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State Polytechnic University — Pomona

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT 120</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>5</td>
</tr>
<tr>
<td>MATH 112</td>
<td>4</td>
</tr>
<tr>
<td>MICRO 200</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

California State University — Dominguez Hills

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 112</td>
<td>4</td>
</tr>
<tr>
<td>MATH 170*</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 116</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

*(Required for B.S. degree only)

California State University — Fullerton

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 202</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>5</td>
</tr>
<tr>
<td>MATH 170</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 116</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

Required general education courses: ENGL 102 or ENGL 103, MATH 116. HED 100 or PSYC 101 or PSYC 241, HIST 202, POL 101. See counselor for other options.
### California State University – Long Beach

- **MATH 170** Analytic Geometry and Calculus I 4
- **MATH 116** Calculus for Managerial, Biological, and Social Sciences (4)
- **MATH 190** Analytic Geometry and Calculus II 4

#### OPTION IN BIOLOGY EDUCATION

- **ASTR 101** Elementary Astronomy 3
- **GEOL 101** The Earth Environment 4
- **ESCI 104** Oceanography 3
- **MICR 200** Principles & Application of Microbiology 5

#### OPTION IN CELL & MOLECULAR BIOLOGY

- **MICR 200** Principles & Application of Microbiology 5

#### OPTION IN ECOLOGY

- **GEOL 101** The Earth Environment 4

#### OPTION IN ZOOLOGY

- **GEOL 101** The Earth Environment 4
- **MICR 200** Principles & Applications of Microbiology (5)

### California State University – Los Angeles

- **CHEM 205** Quantitative Analysis Chemistry 4
- **MATH 116** Calculus for Managerial, Biological, and Social Sciences 4
- **MATH 170** Analytic Geometry and Calculus I 4

Required university general education course: **ENGL 103 Critical and Argumentative Writing**.

CSULA students are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

### COMMON LOWER DIVISION PREPARATION FOR THE UNIVERSITY OF CALIFORNIA

- **BIOL 200** Principles of Biology 5
- **BIOL 201** Principles of Biology 5
- **CHEM 111** General Chemistry 5
- **CHEM 112** General Chemistry 5
- **CHEM 211** Organic Chemistry 5
- **CHEM 212** Organic Chemistry 5
- **PHYS 201** Engineering Physics 4
- **PHYS 202** Engineering Physics 4

### ADDITIONAL LOWER DIVISION PREPARATION FOR THE UNIVERSITY OF CALIFORNIA

**University of California – Irvine**

- **MATH 170** Analytic Geometry and Calculus I 4
- **MATH 190** Analytic Geometry and Calculus II 4
- **PHYS 203** Engineering Physics 4

*(PHYS 203 may substitute for PHYS 202)*

- In completing general education requirements, students must include two courses from the Humanities category chosen from English literature, history, humanities, or philosophy (excluding logic).

**University of California – Los Angeles**

- **BIOL 202** Molecular Biology/Genetics 4
- **MATH 112** Elementary Statistics 4
- **MATH 170** Analytic Geometry and Calculus I 4
- **MATH 190** Analytic Geometry and Calculus II 4

### University of California – Riverside

(Biology B.A., B.S., and Biological Sciences B.S. are offered)

- **MATH 170** Analytic Geometry and Calculus I 4
- **MATH 190** Analytic Geometry and Calculus II 4

The Biological Sciences major differs from the Biology Major in the structure of the upper division course work. In the Biological Sciences major, students choose one of nine upper division tracks of specialized coursework. Those tracks are: Biology; Cell/Molecular and Developmental Biology; Conservation Biology; Entomology; Environmental Toxicology; Evolution and Ecology; Microbiology; Plant Biology; and Medical Biology.

For the Biology Track take 2 from: **CIS 180** or **CIS 280** or **CIS 292** or **CIS 230**

Students intending to meet lower division requirements for any school or division of the University of California should consult the catalog of that institution in addition to checking the ASSIST.ORG Articulation.

### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the 60 units to include (1) The CSU or UC common lower division preparation, (2) **MATH 116 OR 170** (3) the Associate in Arts general education degree requirements.

### CAREER OPPORTUNITIES:

The Bachelor's Degree programs with an emphasis in Biology are designed to qualify the student to enter graduate schools, to enter teaching at the secondary level, and are appropriate for some applied work in laboratories, federal employment, state civil service and the pharmaceutical industry.

### BOTANY TRANSFER PROGRAM

#### COMMON LOWER DIVISION PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>4</td>
</tr>
</tbody>
</table>

**California State University – Long Beach**

- **MATH 170** Analytic Geometry and Calculus I 4
- **MATH 190** Analytic Geometry and Calculus II 4
- **PHYS 203** Engineering Physics 4

**University of California – Riversides**

- **MATH 170** Analytic Geometry and Calculus I 4
- **MATH 190** Analytic Geometry and Calculus II 4

**University of California – Los Angeles**

- **BIOL 202** Molecular Biology/Genetics 4
- **MATH 112** Elementary Statistics 4
- **MATH 170** Analytic Geometry and Calculus I 4
- **MATH 190** Analytic Geometry and Calculus II 4

* In completing general education requirements, students must include two courses from the Humanities category chosen from English literature, history, humanities, or philosophy (excluding logic).
Curricula, Requirements for Majors, Certificates and Transfer Programs

PHYS 101  General Physics  4
PHYS 102  General Physics  4

Required general education course: ENGL 102 or ENGL 103, HED 100 or PSYC 101 or PSYC 241, HIST 103, POL 101. See counselor for other options.

University of California – Riverside
BIOL 201  Principles of Biology  5
BOT 120  Introduction to Plant Science  4
CHEM 111  General Chemistry  5
CHEM 112  General Chemistry  5
CHEM 211  Organic Chemistry  5
CHEM 212  Organic Chemistry  5
MATH 170  Analytical Geometry and Calculus I  4
MATH 190  Analytical Geometry and Calculus II  4
PHYS 201  Engineering Physics  4
PHYS 202  Engineering Physics  4
ZOOL 120  Introduction to Animal Biology  4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include: (1) the above required courses, (2) electives as needed, and (3) the Associate in Arts Degree General Education requirements.

CAREER OPPORTUNITIES: Bachelor’s Degree programs with an emphasis in Botany are designed to qualify the student for graduate study in the field; for teaching through the high school level; for applied work with Federal, State park, forestry and agricultural services, and with private industry.

See Cerritos College Graduation Requirements.

BUSINESS ACCOUNTING PROGRAMS
BUSINESS ACCOUNTING
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:  UNITS
*BUSA 101  Fundamentals of Accounting I  4
BUSA 102  Fundamentals of Accounting II  4
BUSA 131  Computerized Accounting-IBM  3.5
BUSA 133  Computerized Spreadsheet Accounting  3.5
BUSA 201  Intermediate Accounting I  4
BUSA 202  Intermediate Accounting II  4
BUSA 240  Cost Accounting  4
or BUSA 241  Managerial Accounting (4)
BUSA 250  Income Tax Accounting  3
or BUSA 130  Payroll Tax Accounting (3)
BUSF 125  Personal Finance  3
or BUSA 60  QuickBooks Accounting (2)
and BUSA 61  Turbo Tax Accounting (2)
and BUSF 51  Retirement Planning and Investing 1.5

TOTAL CERTIFICATE REQUIREMENTS:  34.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Business Accounting and complete general education requirements to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

BUSINESS ACCOUNTING—ADVANCED ACCOUNTING
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:  UNITS
Complete the Accounting Certificate Requirements:  35
Plus any three of the following four courses:
BUSA 240  Cost Accounting  4
BUSA 241  Managerial Accounting  4
BUSA 270  Fundamentals of Auditing  3
BUSA 280  Advanced Accounting  3

TOTAL CERTIFICATE REQUIREMENTS:  45/46

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Business Advanced Accounting and complete general education requirements to achieve a minimum of 60 units.

OTHER RECOMMENDED COURSE:
BL 112  Business Law  3

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

BUSINESS ACCOUNTING—MICROCOMPUTER ACCOUNTING CLERK
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:  UNITS
BUSA 100  Introduction to Accounting  3
BUSA 101  Fundamentals of Accounting I  4
BUSA 131  Computerized Accounting-IBM  3.5
BUSA 133  Computerized Spreadsheet Accounting  3.5
BUSF 125  Personal Finance  3
or BUSA 60  QuickBooks Accounting (2)
and BUSA 61  Turbo Tax Accounting (2)
BUSF 51  Retirement Planning and Investing 1.5
CIS 102  Introduction to Microcomputer Hardware & Applications Software  3

TOTAL CERTIFICATE REQUIREMENTS:  21.5
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Microcomputer Accounting Clerk and complete general education requirements to achieve a minimum of 60 units.

OTHER RECOMMENDED COURSES:
*BUS 130 Payroll Tax Accounting 3
BL 111 Business Law 3
BCOT 108 WordPerfect for Windows 3.5
or BCOT 112 Word for Windows (3.5)
BCOM 147 Business Communications 3

*Required for Advanced Microcomputer Accounting Clerk Certificate

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.
Please see a Business Counselor or the respective department chairperson for additional alternatives.

BUSINESS ACCOUNTING – PAYROLL ADMINISTRATION CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
BUS 60 Quickbooks Accounting 2
BUS 100 Introduction to Accounting 3
BUS 130 Payroll Tax Accounting 3
BUS 133 Computerized Spreadsheet Accounting 3.5
BUS 230 Advanced Payroll Accounting 3
or BUS 250 Income Tax Accounting (3)
BUS 231 Current Topics in Payroll 1.5
BL 105 Intro to Federal and California Employment, Labor, and Workers’ Compensation Law 3
BA 106 Human Resources Development 3

TOTAL CERTIFICATE REQUIREMENTS: 22

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Payroll Administration and complete general education requirements to achieve a minimum of 60 units.

OTHER RECOMMENDED COURSES:
BUS 101 Fundamentals of Accounting I 4
BUS 131 Computerized Accounting –IBM 3.5
BA 117 Introduction to Supervision 3
BCOM 46 Business Communications 3
BCOT 114 Introduction to Microsoft Office 3.5
or CIS 102 Introduction to Microcomputer Hardware and Applications Software 3

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.
Please see a Business Counselor or the respective department chairperson for additional alternatives.

ADVANCED MICROCOMPUTER ACCOUNTING CLERK CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
Complete Microcomputer Accounting Clerk CERTIFICATE REQUIREMENTS: 22 units

Plus choose from the following any (3) courses:
BUS 130 Payroll Tax Accounting 3
BUS 250 Income Tax Accounting 3
BL 111 Business Law 3
or BA 100 Fundamentals of Business (3)

TOTAL CERTIFICATE REQUIREMENTS: 31

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for Certificate of Achievement in Advanced Microcomputer Accounting Clerk and complete general education requirements to achieve a minimum of 60 units.

OTHER RECOMMENDED COURSES:
BA 100 Fundamentals of Business 3
BL 111 Business Law 3
BCOT 108 WordPerfect for Windows 3.5
or BCOT 112 Word for Windows (3.5)

NOTE: Although many of these courses are transferable, this certificate/A.A. Degree is nontransferable.
Please see a Business Counselor or the respective department for additional alternatives.

BUSINESS ADMINISTRATION PROGRAMS

BUSINESS ADMINISTRATION MINOR CERTIFICATE OF COMPLETION (9 UNITS)

Complete, with a grade of Credit or “C” or higher, BA 100 and two additional Business Administration courses which have been determined in consultation with a full-time business instructor, or counselor, to enhance the student’s individual employment success.

Upon receiving your Certificate of Achievement or A.A. degree, a statement will be placed on your official transcript that you have completed the requirements for a Minor in Business Administration.

A separate certification of completion of the requirements for a Minor in Business Administration can also be issued. Check with department for details.

CAREER OPPORTUNITIES: This minor combined with your major provides significant preparation for employment in business, private industry, and self-employment.

BUSINESS—GENERAL

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
In order to qualify for an Associate in Arts Degree in General Business the following requirements must be met:
1. Completion of the A.A. degree general education and proficiency requirements;
2. Completion of a minimum of 60 degree applicable units.
3. Completion of at least 18 units selected from any of the courses offered by the Business Division. The Business Division departments are listed below:
   a. Business Accounting/Finance
   b. Business Administration
   c. Business Computerized Office Technologies/Business Communications
   d. Business Court Reporting
   e. Business Legal
   f. Business Real Estate

NOTE: Although many of these courses are transferable, this A.A. Degree is nontransferable.
Please see Business Counselors or the respective department for additional alternatives.

CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in business, industry, government, and self-employment.

See Cerritos College Graduation Requirements.

**BUSINESS ADMINISTRATION**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
<td>3</td>
</tr>
<tr>
<td>BL 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>or BA 113</td>
<td>Legal Environment of Business</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 114</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 115</td>
<td>Management Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 120</td>
<td>Management – Accounting and Internal Control</td>
<td>3</td>
</tr>
<tr>
<td>or BUSA 100</td>
<td>Introduction to Accounting</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 132</td>
<td>Computer Applications for Managers</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>(3)</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 18

**RECOMMENDED COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>International Business</td>
</tr>
<tr>
<td>BA 104</td>
<td>Managing Cultural Diversity</td>
</tr>
<tr>
<td>BA 106</td>
<td>Human resource Management</td>
</tr>
<tr>
<td>BA 107</td>
<td>Human Relations in Business</td>
</tr>
<tr>
<td>BA 156</td>
<td>Motivational Presentation Skills for Management</td>
</tr>
<tr>
<td>BA 171-174</td>
<td>Business Administration Work Experience</td>
</tr>
<tr>
<td>BL 101</td>
<td>Introduction to Law</td>
</tr>
<tr>
<td>BUSR 101</td>
<td>Real Estate Principles</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Plan A (Degree and/or Career Option): Meet the requirements for a Certificate of Achievement in Business Administration (18 units). Take 12 units of the Recommended Courses. Complete 18 units of identified general education courses (see Plan A Degree and/or Career Option), proficiency requirements and electives, if necessary, to total a minimum of 60 degree applicable units.

Plan B (CSU General Education Requirements): Meet the requirements for a Certificate of Achievement in Business Administration (18 units). Complete a minimum of 39 units of identified CSU general education courses (see Plan B CSU General Education Requirements), the health and wellness proficiency requirement, and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institutions as listed.

**INTERNATIONAL BUSINESS**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 52</td>
<td>Fundamentals of Importing and Exporting</td>
<td>3</td>
</tr>
<tr>
<td>or BA 155</td>
<td>Introduction to Global Logistics</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 101</td>
<td>International Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 102</td>
<td>International Business Law</td>
<td>3</td>
</tr>
<tr>
<td>or BA 113</td>
<td>Legal Environment of Business</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 104</td>
<td>Managing Cultural Diversity</td>
<td>3</td>
</tr>
<tr>
<td>or BA 107</td>
<td>Human Relations in Business</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 114</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BA 120</td>
<td>Management – Accounting and Internal Control</td>
<td>3</td>
</tr>
<tr>
<td>or BUSA 100</td>
<td>Introduction to Accounting</td>
<td>(3)</td>
</tr>
<tr>
<td>ECON 101</td>
<td>U.S. &amp; Global Economy</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>(3)</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 21

**RECOMMENDED COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>BA 106</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>BL 111</td>
<td>Business Law</td>
</tr>
<tr>
<td>BA 132</td>
<td>Computer Applications for Managers</td>
</tr>
<tr>
<td>BA 156</td>
<td>Motivational Presentation Skills for Managers</td>
</tr>
<tr>
<td>BA 171-174</td>
<td>Business Administration Work Experience</td>
</tr>
<tr>
<td>BL 101</td>
<td>Introduction to Law</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>World Regional Geography</td>
</tr>
<tr>
<td>PHIL 200</td>
<td>World Religions</td>
</tr>
<tr>
<td>POL 210</td>
<td>International Relations</td>
</tr>
</tbody>
</table>

A Conversational Language or a Traditional Language 100 level

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Meet the requirements for a Certificate of Achievement in International Business. Take 12 units of the Recommended Courses. Complete general education requirements and electives to achieve a minimum of 60 units. If you already have an AA, BA, or Master's Degree from a regionally accredited college and meet the Cerritos College General Education requirements, complete the Certificate Requirements to earn an A.A. in International Business.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.
CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in global business, industry, government, and self-employment.

Please see Business Counselors or the respective department for additional alternatives.

RETAIL MANAGEMENT
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 50</td>
<td>Business Math (or equivalent)</td>
<td>3</td>
</tr>
<tr>
<td>BA 106</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 107</td>
<td>Human Relations in Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 114</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BA 115</td>
<td>Management-Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 120</td>
<td>Management-Accounting and Internal Control</td>
<td>3</td>
</tr>
<tr>
<td>or BUSA 100</td>
<td>Introduction to Accounting</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 123</td>
<td>Management – Retailing</td>
<td>3</td>
</tr>
<tr>
<td>or BA 117</td>
<td>Fundamentals of Supervision</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 132</td>
<td>Computer Applications for Managers</td>
<td>3</td>
</tr>
<tr>
<td>or BCOT 114</td>
<td>Introduction to Microsoft Office</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 156</td>
<td>Motivational Presentation Skills for Managers</td>
<td>3</td>
</tr>
<tr>
<td>or BCOM 148</td>
<td>Effective Business Presentation</td>
<td>(3)</td>
</tr>
<tr>
<td>BCOM 46</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>or BCOM 147</td>
<td>Business Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 30

RECOMMENDED COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 104</td>
<td>Managing Cultural Diversity</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>BL 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 113</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 153</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BL 101</td>
<td>Introduction to Law</td>
<td>3</td>
</tr>
<tr>
<td>BUSR 101</td>
<td>Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>BA 171-174</td>
<td>Business Administration Work Experience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

PLAN A (Degree and/or Career Option): Meet the requirements for a Certificate or Achievement in Retail Management (30 units). Take 12 units of the Recommended Courses. Complete 18 units of identified general education courses (see Plan A Degree and/or Career Option), proficiency requirements and electives, if necessary to total a minimum of 60 degree applicable units.

PLAN B (CSU General Education Requirement): Meet the requirements for the Certificate of Achievement in Retail Management (30 units). Complete a minimum of 39 units of identified CSU general education courses (see Plan B CSU General Education Requirements), the health and wellness proficiency requirements and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institution as listed.

PLAN C (Interssegmental General Education Transfer Curricular – IGETC – For Transfer to UC and CSU): Meet the requirements for a certificate of Achievement in Retail Management (18 units). Complete a minimum of 35 (UC) or 38 (CSU) units of identified general education courses (see Plan C – IGETC General Education Requirements), the health and wellness proficiency requirements, and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institution as listed.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in business, industry, government, and self-employment.

Please see Business Counselors or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 115 Finite Mathematics 4
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4

Every Business Administration major at CSULB must take either PHIL 106 (Logic) or PHIL 102 (Ethics). If you plan to specialize in MIS, you must take PHIL 106. If you plan on specializing in Accounting you must take PHIL 102. Specialists in Accounting must take a course in Anthropology, Psychology, or Sociology.

* Recommended, not required.

International Business majors need four semesters of a foreign language.

California State Polytechnic University — Pomona
BL 111 Business Law 3
BUS 100 Introduction to Accounting 3
BUS 101 Fundamentals of Accounting I 4
BUS 102 Fundamentals of Accounting II 4
CIS 102 Introduction to Microcomputer Hardware and Application Software 3
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 112 Elementary Statistics 4

Majors in Accounting or Finance and Law must take Math 116 and either English 102 or 103.

University of Southern California
BUS 100 Introduction to Accounting 3
BUS 101 Fundamentals of Accounting I 4
BUS 102 Fundamentals of Accounting II 4
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
ENGL 100 Freshman Composition 3
ENGL 102 Freshman Composition and Literature 3
or ENGL 103 Critical and Argumentative Writing (3)
or PHIL 202 Critical Thinking and Argumentative Writing (3)
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4
or MATH 170 Analytical Geometry and Calculus I (4)

University of California - Riverside
BA 100 Fundamentals of Business 3
BUS 100 Introduction to Accounting 3
BUS 101 Fundamentals of Accounting I 4
BUS 102 Fundamentals of Accounting II 4
CIS 101 Introduction to Computer Information Systems 3
or CIS 102 Introduction to Microcomputer Hardware and Applications Software (3)
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 112 Elementary Statistics 4
or PSYC 210 Elementary Statistics (4)
MATH 116 Calculus for Managerial, Biological and Social Sciences 4
or MATH 170 Analytical Geometry and Calculus I (4)
PSYC 220 Research Methods 4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete the following common lower division requirements: BUSA 100, BUSA 101, BL 111 or BA 113, CIS 101, ECON 201 and 202 and one transfer level MATH course. Plus, the General Education requirements and Proficiencies for the AA Degree and achieve a minimum of 60 degree applicable units.

CAREER OPPORTUNITIES: Career opportunities are numerous and depend on the specialization selected, ranging from independent practice as a Certified Public Accountant to corporate leadership in a multinational company.

See Cerritos College Graduation Requirements.
See State University General Education List

BUSINESS MANAGEMENT

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
BA 100 Fundamentals of Business 3
BA 101 International Business 3
BA 107 Human Relations in Business 3
BL 111 Business Law 3
BA 115 Management-Business 3
or BA 117 Introduction to Supervision (3)
or BA 153 Small Business Management (3)
BA 132 Computer Applications for Manager 3
or BA 156 Motivational Presentation Skills for Managers (3)

TOTAL CERTIFICATE REQUIREMENTS: 18

RECOMMENDED COURSES
BA 104 Managing Cultural Diversity 3
BA 106 Human Resource Management 3
BA 113 Legal Environment of Business 3
BA 120 Management – Accounting and Internal Control 3
BA 171-174 Business Administration Work Experience 1-4
BL 101 Introduction to Law 3
BUSR 101 Real Estate Principles 3

NATIONAL MANAGEMENT ASSOCIATION’S (NMA) COURSES

SUPERVISORY & MANAGEMENT SKILLS
BA 65 NMA Role of the Supervisor 1
BA 66 NMA Management Principles 1
BA 67 NMA Communication Skills 1
BA 68 NMA Interpersonal Relationship Skills 1
BA 69 NMA Developing Performance 1
BA 75 NMA New Employee 1
BA 76 NMA Coaching and Counseling 1
BA 77 NMA Leadership Development 1
BA 78 NMA Business Concepts 1
BA 79 NMA Law for the Supervisor 1

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

PLAN A (Degree and/or Career Option): Meet the requirements for a Certificate of Achievement in Business Marketing (18 units). Take 12 units of the recommended Courses. Complete 18 units of identified general education courses (see Plan A Degree and/or Career Option), proficiency requirements and electives, if necessary, to total a minimum of 60 degree applicable units.

PLAN B (CSU General Education Requirements): Meet the requirements for a Certificate of Achievement in Business Marketing (18 units). Complete a minimum of 39 units of identified CSU general education courses (see Plan B CSU General Education Requirements), the health and wellness proficiency requirement, and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institutions as listed.
PLAN C (Intersegmental General Education Transfer Curriculum – IGETC – For Transfer to UC and CSU): Meet the requirements for a Certificate of Achievement in Business Marketing (18 units). Complete a minimum of 35 (UC) or 38 (CSU) units of identified general education courses (see Plan C – IGETC General Education Requirements), the health and wellness proficiency requirement, and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institutions as listed.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in business, industry, government and self-employment.

Please see Business Counselors or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.

SMALL BUSINESS MANAGEMENT/ENTREPRENEURSHIP CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 153</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 114</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BL 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 117</td>
<td>Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BA 120</td>
<td>Management Accounting and Internal Control</td>
<td>3</td>
</tr>
<tr>
<td>or BUSA 100</td>
<td>Introduction to Accounting</td>
<td>(3)</td>
</tr>
<tr>
<td>or BCOT 114</td>
<td>Introduction to Microsoft Office</td>
<td>(3)</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 18

RECOMMENDED COURSE:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 50</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>BA 52</td>
<td>Fundamentals of Importing and Exporting</td>
<td>3</td>
</tr>
<tr>
<td>BA 62</td>
<td>Business on the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>BA 63</td>
<td>How to Start a Home-based Business</td>
<td>1.5</td>
</tr>
<tr>
<td>BA 104</td>
<td>Managing Cultural Diversity</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>BA 118</td>
<td>Management – Retailing</td>
<td>3</td>
</tr>
<tr>
<td>BA 121</td>
<td>Sales</td>
<td>3</td>
</tr>
<tr>
<td>BA 156</td>
<td>Motivational Presentation Skills for Managers</td>
<td>3</td>
</tr>
<tr>
<td>BA 171-174</td>
<td>Business Administration Occupational Work Experience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

1. Meet the requirement for a Certificate of Achievement in Small Business Management/Entrepreneurship.
2. Take twelve units of the recommended courses not used for Department/Division requirements.
3. Complete general education requirements and electives to achieve a minimum of 60 units.
4. If you already have an AA degree or higher from a regionally accredited college, and you meet the Cerritos College General Education proficiency requirements, complete the Certificate Requirements to earn an AA in Small Business Management/Entrepreneurship.

NOTE: Although many of these courses are transferable, the certificate/A.A. Degree is nontransferable.

CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in business, industry, government, and self-employment.

Please see Business Counselors or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.

EMPLOYMENT DEVELOPMENT CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS

1. COMPLETION OF 9 UNITS IN COURSES SELECTED FROM ONE OF THE DEPARTMENTS LISTED BELOW:
   a. Business Accounting/Finance
   b. Business Administration
   c. Business Computerized Office Technologies/Business Communications
   d. Business Court Reporting
   e. Business Paralegal
   f. Business Real Estate

2. COMPLETION OF 12 UNITS OF OCCUPATIONAL WORK EXPERIENCE COURSES IN THE SAME OCCUPATIONAL DISCIPLINE AS LISTED ABOVE. (REQUIREMENT: CONCURRENT ENROLLMENT IN ONE 4-UNIT WORK EXPERIENCE COURSE AND ONE 3-UNIT COURSE FROM DEPARTMENT SELECTED.)

   EXAMPLE: (Using the Business Administration Department)
   BA 100 Fundamentals of Business 3
   *Business Administration Occupational Work Experience 4
   BA 107 Human Relations in Business 3
   *Business Administration Occupational Work Experience 4
   BL 111 Business Law 3
   *Business Administration Occupational Work Experience 4

   TOTAL CERTIFICATE REQUIREMENTS: 21

   *This program permits 12 units of credit to be earned on the job. The student must work at least 20 hours per week in a related industry.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement in Business Employment Development. Complete BA 101, BA 107, BL 110, BL 111, BA 115 or BA 153, BA 121 or BA 110 or BA 114, and BCOM 147 and complete general education requirements to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in business, industry, government, and self-employment.

Please see Business Counselors or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.
BUSINESS MARKETING
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 100</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>3</td>
</tr>
<tr>
<td>BA 107</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>3</td>
</tr>
<tr>
<td>BA 114</td>
<td>3</td>
</tr>
<tr>
<td>BA 121</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 18

RECOMMENDED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 104</td>
<td>3</td>
</tr>
<tr>
<td>BA 106</td>
<td>3</td>
</tr>
<tr>
<td>BA 113</td>
<td>3</td>
</tr>
<tr>
<td>BA 115</td>
<td>3</td>
</tr>
<tr>
<td>BA 120</td>
<td>3</td>
</tr>
<tr>
<td>BA 132</td>
<td>3</td>
</tr>
<tr>
<td>BA 156</td>
<td>3</td>
</tr>
<tr>
<td>BA 171-174</td>
<td>1-4</td>
</tr>
<tr>
<td>BUSR 101</td>
<td>3</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

PLAN A (Degree and/or Career Option): Meet the requirements for a Certificate of Achievement in Business Marketing (18 units). Take 12 units of the recommended Courses. Complete 18 units of identified general education courses (see Plan A Degree and/or Career Option), proficiency requirements and electives, if necessary, to total a minimum of 60 degree applicable units.

PLAN B (CSU General Education Requirements): Meet the requirements for a Certificate of Achievement in Business Marketing (18 units). Complete a minimum of 39 units of identified CSU general education courses (see Plan B CSU General Education Requirements), the health and wellness proficiency requirement, and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institutions as listed.

PLAN C (Interssegmental General Education Transfer Curriculum – IGETC – For Transfer to UC and CSU): Meet the requirements for a Certificate of Achievement in Business Marketing (18 units). Complete a minimum of 35 (UC) or 38 (CSU) units of identified general education courses (see Plan C – IGETC General Education Requirements), the health and wellness proficiency requirement, and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institutions as listed.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in business, industry, government, and self-employment.

Please see Business counselors or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.

BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES PROGRAM

BUSINESS COMMUNICATIONS
CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOM 45</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 51</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOM 147</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 148</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 150</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 152</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 96</td>
<td>1.5</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 16.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Completion in Business Communications – and complete general education requirement and electives to achieve a minimum of 60 units. Although many of these courses are transferable, this certificate/A.A. degree is nontransferable. Please see business counselors or the respective department chairperson for additional alternatives.

NOTE: Although many of these courses are transferable, this certificate of completion is nontransferable.

Please see Business counselors or the respective department chairperson for additional alternatives.

BILINGUAL BUSINESS OFFICE TECHNOLOGIES
CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOM 46</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 63</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 96</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 112</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 113</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 131</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 161</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 17

NOTE: Although many of these courses are transferable, this certificate of completion is nontransferable.

Please see Business counselors or the respective department for additional alternatives.
BILINGUAL LEGAL OFFICE SKILLS
CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS  UNITS
BCOM 46  Business Communications  3
BCOT 63  Keyboarding Speed/Control Building  1
BCOT 82  Spanish Legal Office Terminology/Vocabulary  1.5
BCOT 112  Microsoft Word For Windows  3.5
(For MOUS Preparation)
BCOT 131  Beginning College Keyboarding & Document Processing  3.5

TOTAL CERTIFICATE REQUIREMENTS: 12.5

NOTE: Although many of these courses are transferable, this certificate of completion is nontransferable. Please see Business counselors or the respective department for additional alternatives.

MICROSOFT OFFICE USER SPECIALIST (MOUS) CERTIFICATION ACADEMY
CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS  UNITS
BCOT 112  Microsoft Word for Windows  3.5
or BCOT 90  Microsoft Word Core Level  1.5
and BCOT 91  Microsoft Word Expert Level  1.5
BCOT 113  Microsoft Excel  3.5
or BCOT 92  Microsoft Excel Core Level  1.5
and BCOT 93  Microsoft Excel Expert Level  1.5
CIS 155  Microsoft Access  3
BCOT 96  Microsoft PowerPoint Core/Expert Level  1.5
BCOT 97  Microsoft Outlook Core Level  1.5

TOTAL CERTIFICATE REQUIREMENTS: 12/13

NOTE: Although many of these courses are transferable, this certificate of completion is nontransferable. Please see Business counselors or the respective department for additional alternatives.

OFFICE TECHNOLOGIES
CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS  UNITS
BCOM 46  Business Communications  3
BCOT 89  Internet as a Business Communication Tool  3.5
BCOT 114  Introduction to Microsoft Office  3.5
BCOT 133  Advanced College Keyboarding & Document Processing  3.5
BCOT 161  Principles of Filing  1
BCOT 162  Business Spelling & Proofreading Skills  3

TOTAL CERTIFICATE REQUIREMENTS: 17.5

NOTE: Although many of these courses are transferable, this certificate of completion is nontransferable. Please see Business counselors or the respective department for additional alternatives.

LEGAL SECRETARIAL PROGRAM
LEGAL SECRETARY
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS  UNITS
BCOM 147  Business Communications  3
BCOM 152  Job Search in the Business Field  1.5
BCOT 63  Keyboarding Speed/Control Building  1
BCOT 81  Legal Office Procedures  4
BCOT 83  Legal Office Terminology/Machine Transcription  4.5
BCOT 89  Internet as a Business Communication Tool  3.5
BCOT 112  Microsoft Word For Windows  3.5
(For MOUS preparation)
BCOT 133  Advanced College Keyboarding & Document Processing  3.5
BCOT 162  Business Spelling and Proofreading Skills  3
BL 56  Introduction to Computerized Legal Software  3
BL 101  Introduction to Law  3

TOTAL CERTIFICATE REQUIREMENTS: 33.5

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable. Please see a Business counselor or the respective department chairperson for additional alternatives.

OFFICE PROGRAM
FILE CLERK
CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS  UNITS
BCOM 152  Job Search in the Business Field  1.5
BCOT 131  Beginning College Keyboarding & Document Processing  3.5
or BCOT 132  College Keyboarding & Document Processing Review  2
BCOT 161  Principles of Filing  1
BCOT 162  Business Spelling and Proofreading Skills  3

TOTAL CERTIFICATE REQUIREMENTS: 7.5/9

NOTE: Although many of these courses are transferable, this Certificate of Completion is nontransferable. Please see Business counselors or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.
**GENERAL OFFICE**  
**CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOM 46  Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 147  Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 152  Job Search in the Business Field</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 60  Telephone Techniques/Customer Service</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 63  Keyboarding Speed/Control Building</td>
<td>2</td>
</tr>
<tr>
<td>BCOT 89  Internet as a Business Communication Tool</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 112  Microsoft Word for Windows</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 114  Introduction to Microsoft Office</td>
<td>3.5</td>
</tr>
<tr>
<td>or BCOT 132  College Keyboarding &amp; Document Processing Review</td>
<td>2</td>
</tr>
<tr>
<td>BCOT 133  Advanced College Keyboarding &amp; Document Processing</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 161  Principles of Filing</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 162  Business Spelling and Proofreading Skills</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 30.5/32

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Meet the requirements for a Certificate of Achievement in General Office. Complete general education requirements and electives to achieve a minimum of 60 units.

**NOTE:** Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

Please see Business counselors or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.

**RECEPTIONIST**  
**CERTIFICATE OF COMPLETION**

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOM 152  Job Search in the Business Field</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 60  Telephone Techniques/Customer Service</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 62  Computer Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 63  Keyboarding Speed/Control Building</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 161  Principles of Filing</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 5.5

**NOTE:** Although many of these courses are transferable, this Certificate of Completion is nontransferable.

Please see Business counselors or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.

**WORD PROCESSING**  
**CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOM 46  Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 147  Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 152  Job Search in the Business Field</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 63  Keyboarding Speed/Control Building</td>
<td>2</td>
</tr>
<tr>
<td>BCOT 89  Internet as a Business Communication Tool</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 96  Microsoft Powerpoint Core/Expert Level</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 97  Microsoft Outlook Core Level</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 112  Microsoft Word for Windows</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 113  Microsoft Excel</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 114  Introduction to Microsoft Office</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 116  Desktop Publishing – Word for Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>or BCOT 117  Desktop Publishing – Microsoft Publisher</td>
<td>(1.5)</td>
</tr>
<tr>
<td>BCOT 133  Advanced College Keyboarding &amp; Document Processing</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 155  Administrative Secretarial Procedures</td>
<td>4</td>
</tr>
<tr>
<td>BCOT 161  Principles of Filing</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 162  Business Spelling and Proofreading Skills</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 36.5

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Meet the requirements for a Certificate of Achievement in Word Processing.

Complete general education requirements and electives to achieve a minimum of 60 units.

**NOTE:** Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

Please see Business counselors or the respective department for additional alternatives.

**SECRETARIAL PROGRAM**

**SECRETARY/ADMINISTRATIVE ASSISTANT**  
**CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOM 147  Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 152  Job Search in the Business Field</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 63  Keyboarding Speed/Control Building</td>
<td>2</td>
</tr>
<tr>
<td>BCOT 89  Internet as a Business Communication Tool</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 96  Microsoft Powerpoint Core/Expert Level</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 97  Microsoft Outlook Core Level</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 112  Microsoft Word for Windows</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 113  Microsoft Excel</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 114  Introduction to Microsoft Office</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 116  Desktop Publishing – Word for Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>or BCOT 117  Desktop Publishing – Microsoft Publisher</td>
<td>(1.5)</td>
</tr>
<tr>
<td>BCOT 133  Advanced College Keyboarding &amp; Document Processing</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 155  Administrative Secretarial Procedures</td>
<td>4</td>
</tr>
<tr>
<td>BCOT 161  Principles of Filing</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 162  Business Spelling and Proofreading Skills</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 36.5
**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Meet the requirements for a Certificate of Achievement in Secretary/Administrative Assistant and complete general education requirements and electives to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

Please see Business counselors or the respective department chairperson for additional alternatives.

---

### MEDICAL TRANSCRIPTIONIST

**CERTIFICATE OF COMPLETION**

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOT 63 Keyboarding Speed/Control Building</td>
<td>1</td>
</tr>
<tr>
<td>BCOT 70 Medical Machine Transcription</td>
<td>4</td>
</tr>
<tr>
<td>BCOT 112 Microsoft Word for Windows (for MOUS preparation)</td>
<td>3.5</td>
</tr>
<tr>
<td>or BCOT 133 Advanced College Keyboarding &amp; Document Processing</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 162 Business Spelling and Proofreading Skills</td>
<td>3</td>
</tr>
<tr>
<td>MA 161 Medical Terminology</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 14.5

**OPTIONAL SPECIALTY COMPLETION OF ALL THE COURSES LISTED BELOW:**

### SECRETARY - MEDICAL ENVIRONMENT

| BCOT 71 Computers in the Medical Office | 3.5 |
| BCOT 112 Microsoft Word for Windows (for MOUS preparation) | 3.5 |
| BCOT 133 Advanced College Keyboarding & Document Processing | 3.5 |
| BCOT 155 Administrative Secretarial Procedures | 4 |
| BCOT 162 Business Spelling and Proofreading Skills | 3 |

**TOTAL CERTIFICATE REQUIREMENTS:** 17.5

### BUSINESS LEGAL PROGRAM

**PARALEGAL ASSOCIATE IN ARTS DEGREE**

<table>
<thead>
<tr>
<th>SECTION A - LEGAL SPECIALTY CORE REQUIREMENTS:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL 56 Introduction to Computerized Legal Software</td>
<td>3</td>
</tr>
<tr>
<td>BL 100 Introduction to California Civil Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BL 101 Introduction to Law</td>
<td>3</td>
</tr>
<tr>
<td>BL 102 Advanced California Civil Procedures</td>
<td>3</td>
</tr>
<tr>
<td>or BL 113 Fundamentals of Alternate Dispute Resolutions</td>
<td>3</td>
</tr>
<tr>
<td>BL 103 Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>BL 120 Legal Ethics</td>
<td>1.5</td>
</tr>
<tr>
<td>or BL 171/174 Business Paralegal Occupational Work Experience</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**TOTAL REQUIREMENTS MUST BE A MINIMUM OF 33**

NOTE: DEPARTMENT RECOMMENDATION: It is strongly recommended that all graduates who wish to be assisted with job placement through the Paralegal Department complete BL 173 or BL 174 Work Experience with a letter of recommendation from their employer and complete CG 210, Job Search Strategies.

General education requirements must also be completed to achieve a minimum of 60 units for an A.A. Degree in Paralegal. General Education courses must meet the American Bar Association Requirements. No course may be taken as “Credit by Exam.”

**THIS PROGRAM IS APPROVED BY THE AMERICAN BAR ASSOCIATION**

**PARALEGAL SPECIALTY REQUIREMENTS**

In order to obtain a paralegal specialty, the student must complete the Paralegal A.A. degree or certificate. Units for the specialty may come from the Paralegal A.A. degree or certificate requirements from additional courses as outlined below:

**OPTIONAL SPECIALTIES**

### COMMERCIAL

| BL 106 Bankruptcy Law | 3 |
| BL 220 Landlord and Tenant Law | 3 |
| BL 230 Corporate Law | 3 |
| or BL 110 Business Law | 3 |

### PROBATE & ESTATE PLANNING

| BL 107 Probate Procedures | 3 |
| BL 112 Estate Planning for the Paralegal | 3 |
| BL 115 Elder Law | 3 |
LITIGATION
BL 102 Advanced California Civil Procedures 3
BL 104 Advanced Legal Research 3
BL 109 Torts and Personal Injury Law and Procedures 3

FAMILY LAW
BL 102 Advanced California Civil Procedures 3
or BL 113 Fundamentals of Alternate Dispute Resolutions (3)
BL 104 Advanced Legal Research 3
BL 108 Family Law Procedures 3

LEGAL TECHNOLOGY
BL 52 Law Office Management 3
BL 57 Legal Document Production 3
BL 65 Advanced Legal Technology 3

CRIMINAL LAW
BL 116 Criminal Law 3
BL 104 Advanced Legal Research 3
BL 102 Advanced California Civil Procedures 3
or BL 113 Fundamentals of Alternate Dispute Resolutions 3

BUSINESS LAW
BL 110 Business Law 3
BL 111 Business Law 3
BL 113 Fundamentals of Alternate dispute Resolutions 3

PARALEGAL CERTIFICATE:
A student may earn a Paralegal Certificate if the student has already completed an A.A. degree or B.A. degree prior to taking any courses applied to the Paralegal Certificate. Students must complete a total of 21 units. These units must include BL 56, BL 100, BL 101, BL 103, BL 111, and the students may choose either BL 102, or BL 113 and BL 120 or BL 171-174. Any additional units needed to complete the 21 unit requirement may be taken from Section B. All 21 units must be taken at Cerritos College.

Students must consult with the Paralegal or Counseling Department prior to entering the certificate program. Any Business Legal courses which were taken prior to the completion of the student's requisite A.A. degree will not be counted as part of the certificate units.

CAREER OPPORTUNITIES: Escrow Secretary (203.382-022), File Clerk (206.362-010), Insurance Clerk (219.387-014), Legal Assistant (119.267-022), Paralegal (119.267-026), Legal Secretary (201.362-010).

BUSINESS COURT REPORTING/COMPUTERIZED SHORTHAND

STATE REQUIREMENTS
The Court Reporters Board of California issues a certificate upon successful completion of the following requirements and passing of the state examination.

<table>
<thead>
<tr>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>215</td>
</tr>
<tr>
<td>125</td>
</tr>
<tr>
<td>175</td>
</tr>
<tr>
<td>55</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

TOTAL MINIMUM PRESCRIBED ACADEMIC HOURS 660
TOTAL MACHINE SHORTHAND AND TRANSCRIPTION 2300

<table>
<thead>
<tr>
<th>May be Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITS</td>
</tr>
<tr>
<td>3.5</td>
</tr>
<tr>
<td>BUSC 57A</td>
</tr>
<tr>
<td>Beginning Aural Language Skills for Court Reporters</td>
</tr>
<tr>
<td>BUSC 57B</td>
</tr>
<tr>
<td>Advanced Aural Language Skills for Court Reports</td>
</tr>
<tr>
<td>BUSC 113</td>
</tr>
<tr>
<td>Legal Terminology</td>
</tr>
<tr>
<td>BUSC 114</td>
</tr>
<tr>
<td>Medical Terminology for Machine Shorthand</td>
</tr>
<tr>
<td>BUSC 115</td>
</tr>
<tr>
<td>Medical Shorthand for Court Reporters</td>
</tr>
<tr>
<td>BUSC 119A</td>
</tr>
<tr>
<td>Beginning Computer-Aided Transcription</td>
</tr>
<tr>
<td>BUSC 119C</td>
</tr>
<tr>
<td>Advanced Computer-Aided Transcription</td>
</tr>
<tr>
<td>BUSC 140</td>
</tr>
<tr>
<td>Computerized Shorthand Theory</td>
</tr>
<tr>
<td>BUSC 141</td>
</tr>
<tr>
<td>Computerized Shorthand Theory--Review/Skill Development</td>
</tr>
<tr>
<td>BUSC 142</td>
</tr>
<tr>
<td>Intermediate Computerized Shorthand</td>
</tr>
<tr>
<td>BUSC 143</td>
</tr>
<tr>
<td>Computerized Shorthand Speed Building I</td>
</tr>
<tr>
<td>BUSC 144</td>
</tr>
<tr>
<td>Computerized Shorthand Speed Building II</td>
</tr>
<tr>
<td>BUSC 145</td>
</tr>
<tr>
<td>Computerized Shorthand Speed Building III</td>
</tr>
<tr>
<td>BUSC 146</td>
</tr>
<tr>
<td>Computerized Shorthand Speed Building (140-170 wpm)</td>
</tr>
<tr>
<td>BUSC 147</td>
</tr>
<tr>
<td>Computerized Shorthand Speed Building (160-190 wpm)</td>
</tr>
<tr>
<td>BUSC 148</td>
</tr>
<tr>
<td>Computerized Shorthand Speed Building (180-210 wpm)</td>
</tr>
<tr>
<td>BUSC 149</td>
</tr>
<tr>
<td>Computerized Shorthand Speed Building (190-225 wpm)</td>
</tr>
<tr>
<td>BUSC 157</td>
</tr>
<tr>
<td>Congressional Testimony</td>
</tr>
<tr>
<td>BUSC 158</td>
</tr>
<tr>
<td>Professional Practices Hearings/Conferences</td>
</tr>
<tr>
<td>BUSC 159</td>
</tr>
<tr>
<td>Computerized Shorthand Speed Development (180-210 wpm)</td>
</tr>
<tr>
<td>BUSC 173/174</td>
</tr>
<tr>
<td>Business Court Reporting/Computerized Shorthand</td>
</tr>
<tr>
<td>BUSC 173</td>
</tr>
<tr>
<td>Occupational Work Experience</td>
</tr>
</tbody>
</table>

BUSINESS LEGAL MINOR
CERTIFICATE OF COMPLETION (9 UNITS)

The Business Legal Minor may be obtained by completing three of the following core courses with a grade of Credit or “C” or higher: BL 101, Introduction to Law; BL 110, Business Law; BL 111, Business Law; BL 113, Fundamentals of Alternate Dispute Resolutions or BL 161, Consumer Law.

Upon receiving your Certificate of Achievement or A.A. degree, a statement can be placed on your official transcript that you have completed the requirements for a Business Legal Minor.

CAREER OPPORTUNITIES: This minor combined with your major provides legal knowledge essential in business, in private industry, and in self-employment.
BUSC 185  CSR/RPR Examination Preparation  1.5  3 times  27
BUSC 192  Transcription Procedures  2  2 times  54

Choose from the following for a minimum of 35 hours:
BCOT 162  Business Spelling and Proofreading Skills  3  54
BCOM 46  Business Communications  3  54
ENGL 50A  English Grammar  3  54
ENGL 53  Punctuation, Capitalization, and Spelling  3  54
ENGL 107  Vocabulary Building  3  54
ENGL 108  Vocabulary Building for Professionals  2  36

Choose from the following for a minimum of 103 hours:
BUSC 116  Introduction to Courtroom Procedures  4  108
BUSC 118  Deposition Procedures, Codes and Ethics  4  108

Total requirements must be a minimum of: 95/97 units

In order for a person to qualify from a school to take the state licensing examination, the person shall complete a program at a recognized school. For information concerning the minimum requirements that a court reporting program must meet in order to be recognized, contact: The Court Reporters Board of California; 2523 Capitol Oaks Drive, Suite 230, Sacramento, CA 95833; (916) 263-3660.

The Cerritos College Program is approved by the Court Reporters Board of California, 2523 Capitol Oaks Drive, Suite 230, Sacramento, CA 95833. Telephone: (916) 263-3660, Consumer Affairs.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Specific graduation requirements for court reporting students shall include the following minimum standards:

a) The student shall pass three 5-minute tests with 95% accuracy at each of the following speeds: 225 words per minute testimony (two-voice), 200 words per minute jury charge, and 180 words per minute literary.

b) The student shall pass at least two 5-minute time writings in keyboarding at a minimum of 60 gross words per minute with a maximum of 5 errors.

c) The student shall complete at least 60 verified hours of apprentice internship.

Achieve the minimum of 225 wpm shorthand speed and 60 net wpm typing speed.

Complete general education requirements and electives to achieve a minimum of 60 units. Plus Business courses as follows:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSC 57B  Advanced Aural Language Skills for Court Reporters</td>
<td>3.5</td>
</tr>
<tr>
<td>BUSC 113  Legal Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 115  Medical Shorthand for Court Reporters</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 116  Introduction to Courtroom Procedures</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 118  Deposition Procedures, Codes &amp; Ethics</td>
<td>4</td>
</tr>
<tr>
<td>BUSC 119A  Beginning Computer-Aided Transcription</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 119D  Basic Concepts of Realtime</td>
<td>3</td>
</tr>
<tr>
<td>BUSC 149  Computerized Shorthand Speed Building (190-225 wpm)</td>
<td>5</td>
</tr>
</tbody>
</table>

TOTAL 29.5

CAREER OPPORTUNITIES: Employment primarily as a court reporter in superior and municipal courts and the deposition field.
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirement for Certificate of Completion in Proofreader and complete general education requirements and electives to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this certificate is nontransferable.

Please see Business Counselors or the respective department for additional alternatives.

REALTIME RAPID TEXT ENTRY CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
BUSC 57B Advanced Aural Language 3.5
BUSC 119D Basic Concepts of Realtime 3
BUSC 125 Computer Shorthand Realtime Practicum I 4.5
BUSC 139 Career Opportunities 1
BUSC 146 Computerized Shorthand Speed Building (140-170 wpm) 4.5

TOTAL CERTIFICATE REQUIREMENTS 16.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Completion in Text Entry-Business and complete general education requirements and electives to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this certificate is nontransferable.

Please see Business Counselors or the respective department for additional alternative.

SCOPIST FOR COURT REPORTERS CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENT: UNITS
BUSC 57B Advanced Aural Language Skills for Court Reporters 3.5
BUSC 113 Legal Terminology 3
BUSC 119C Advanced Computer-Aided Transcription 3
BUSC 139 Career Opportunities 1
BUSC 192 Transcription Procedures 2

Choose from the following for a total of 3 units
BUSC 114 Medical Terminology for Machine Shorthand 3
MA 161 Medical Terminology 3

TOTAL CERTIFICATE REQUIREMENTS: 15.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Completion in Scopist/Proofreader and complete general education requirements and electives to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this certificate is nontransferable.

Please see Business Counselor or the respective department for additional alternatives.

BUSINESS REAL ESTATE

CLASS COMPLETION CERTIFICATE 3 UNITS
REAL ESTATE DEPARTMENT AWARD 12/13 UNITS
REAL ESTATE CERTIFICATE OF ACHIEVEMENT 18/20 UNITS
CALIFORNIA REAL ESTATE CERTIFICATE 25/26 UNITS A.A. DEGREE IN BUSINESS REAL ESTATE 60 UNITS

REAL ESTATE DEPARTMENT AWARD - 12/13 UNITS

REQUIREMENTS UNITS
BUSR 101 Real Estate Principles 3
BUS 100 Introduction to Accounting 3
or BUSA 101 Fundamentals of Accounting I (4)
BL 111 Business Law 3
or BA 121Sales 3

Choose from the following for a total of 12-13 units:
BUSR 50 Introduction to Real Estate Software 3
BUSR 52 Mortgage Loan Brokering and Lending 3
BUSR 120 Real Estate Finance 3
BUSR 125 Legal Aspects of Real Estate 3
BUSR 130 Real Estate Practice 3
BUSR 131 Real Estate Appraisal 4

REAL ESTATE CERTIFICATE OF ACHIEVEMENT - 18/20 UNITS

DIVISION/DEPARTMENT REQUIREMENTS UNITS
BUSR 101 Real Estate Principles 3
BUSR 173/174 Work Experience/Career Internship 1/4

Choose from the following for a total of 12-13 units:
BUSR 50 Introduction to Real Estate Software 3
BUSR 52 Mortgage Loan Brokering and Lending 3
BUSR 120 Real Estate Finance 3
BUSR 125 Legal Aspects of Real Estate 3
BUSR 130 Real Estate Practice 3
BUSR 131 Real Estate Appraisal 4
BUSR 160 Real Estate Economics 3

CALIFORNIA REAL ESTATE CERTIFICATE - 25/26 UNITS

STATE REQUIREMENTS UNITS
BUSR 101 Real Estate Principles 3
BUSR 120 Real Estate Finance 3
BUSR 125 Legal Aspects of Real Estate 3
BUSR 130 Real Estate Practice 3
BUSR 131 Real Estate Appraisal 4
BUSR 160 Real Estate Economics 3

Electives: Select a minimum of 6 units from the following courses:
BL 111 Business Law 3
BUS 100 Introduction to Accounting 3
BUS 101 Fundamentals of Accounting I 4
BUSR 50 Introduction to Real Estate Software 3
BUSR 52 Mortgage Loan Brokering and Lending 3
BUSR 173/174 Work Experience/Career Internship 3/4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for the California Real Estate Certificate and complete six units from the following: BA 121, BCOM 147, BUSF 125, BUSR 50, BUSR 51, BUSR 53, BUSR 140, BUSR 151 and complete general education requirements and electives to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

Please see Business counselors or the respective department for additional alternatives.

REAL ESTATE LICENSE REQUIREMENTS

1. Salesperson's License:

To qualify for a real estate Salesperson's License, an applicant must have completed a college-level course in Real Estate Principles. Those who must satisfy this new requirement must
also (either prior to issuance of the original license or within eighteen months after issuance) complete a course in Real Estate Practice and one real estate course selected from among the following: Real Estate Practice--Legal Aspects of Real Estate Real Estate Appraisal--Real Estate Finance Accounting (any course)--Real Estate Economics Business Law--Fundamentals of Escrow R.E. Property Management--R.E. Office Administration Mortgage Loan Brokering and Lending

2. Broker's License:
   Applicants for a Broker's License must have completed eight 3-unit college-level courses in addition to the experience requirement*. These courses must include the following five courses: Real Estate Practice--Legal Aspects of Real Estate Real Estate Appraisal--Real Estate Economics Accounting (any course)--Real Estate Economics Business Law--Fundamentals of Escrow R.E. Property Management--R.E. Office Administration

The remaining three courses are to be selected from the following: R.E. Office Administration--Adv. Legal Aspects of R.E. Advanced R.E. Appraisal--Practices of Escrow Real Estate Principles--Business Law Property Management--Fundamentals of Escrow Mortgage Loan Brokering and Lending--Computer Applications in Real Estate

*If an applicant completes both Accounting and Real Estate Economics, only two additional courses are required.

*Experience requirement is fulfilled by any one of the following:
1. Two years as a real estate salesperson;
2. Bachelors degree from an accredited college or university; or
3. Two years employment in related industries such as escrow offices, banks, savings and loans, or building industries.

Please see Business Counselors or Real Estate Department Chairman for additional licensing information.

REAL ESTATE SCHOLARSHIPS ARE AVAILABLE

Please see Business Counselors or Real Estate Department Chairman for further scholarship information.

CHEMISTRY

TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

AND THE UNIVERSITY OF CALIFORNIA

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>5</td>
</tr>
<tr>
<td>MATH 170</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 100</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>4</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Long Beach*

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology 5</td>
</tr>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry 4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III 4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics 4</td>
</tr>
</tbody>
</table>

外语: A competence is encouraged in reading scientific German, French, Russian, Chinese or Japanese.

California State University – Los Angeles*

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry 4</td>
</tr>
<tr>
<td>CIS 178</td>
<td>Programming in Fortran 3</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III 4</td>
</tr>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations 4</td>
</tr>
</tbody>
</table>

English 103 is university requirement and must be taken for all majors at CSULA.

NOTE: CSULA students are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

California State Polytechnic University – Pomona

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry 4</td>
</tr>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++ 3</td>
</tr>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations 4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics 4</td>
</tr>
</tbody>
</table>

University of California – Irvine

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry 5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry 5</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III 4</td>
</tr>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations 4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics 4</td>
</tr>
</tbody>
</table>

University of California – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry 5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry 5</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III 5</td>
</tr>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations 4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics 4</td>
</tr>
</tbody>
</table>

*The above listed requirements are for a Bachelor in Science Degree.

See counselor for Bachelor of Arts Degree requirements.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS.

Complete 60 units to include (1) the above required courses and (2) Associate in Arts Degree general education requirements.

CAREER OPPORTUNITIES: Chemistry graduates with their Bachelor's Degrees qualify for graduate studies in Chemistry or Biochemistry. Chemistry graduates find rewarding careers in teaching, medicine, pharmacy, forensic science and industrial and governmental scientific endeavors.

See Cerritos College Graduation Requirements.
See State University General Education or IGETC List.
**CHICANO STUDIES**
**TRANSFER PROGRAM**

Chicano Studies is an interdisciplinary program of study which fosters an awareness of the contributions and participation of Mexican Americans in United States society. In its broader applications, the program explores the historical, political, social, and psychological aspects of the Mexican American experience as a minority group.

**LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Long Beach</td>
<td>SPAN 245 Introduction to Chicano/Mexican American Culture</td>
<td>3</td>
</tr>
<tr>
<td>California State University – Dominguez Hills</td>
<td>SPAN 245 Introduction to Chicano/Mexican American Culture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGL 102 or 103 recommended</td>
<td></td>
</tr>
</tbody>
</table>

See a counselor for campus specific information.

**University of California – Los Angeles**

One course in introduction to Chicano Life and Culture, one course in Chicanos in American Society, and the equivalent of five quarter terms in Spanish.

**University of California – Riverside**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 210 or SOC 215</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 245</td>
<td>3</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Completion of 60 units to include (1) the above required courses, (2) the AA Degree general education requirements, and (3) electives as needed.

**CAREER OPPORTUNITIES:** Completion of an upper division degree program can lead to employment as an elementary or secondary school teacher, school counselor, resource teacher, program coordinator, community, city, and state agencies. This program may also lead to employment in law, anthropology, and sociology.

See Cerritos College Graduation Requirements.

See State University General Education List.

**CHILD DEVELOPMENT/EARLY CHILDHOOD**

This program welcomes students from diverse cultural and ethnic backgrounds. Male students are encouraged to investigate career opportunities in Child Development.

The Child Development Department offers several different options for the student interested in working with young children. All full-time Child Development Instructors are available to advise students in all of the following areas:

A. **Child Development Department Specializations**

   - The specializations are designed to meet the minimum requirements of the Department of Social Services to teach in licensed private preschools and childcare programs. This is an entry-level career choice. The student is encouraged to pursue additional units in Child Development to advance in the field. Applications for the following Verifications of Completion must be made at the Health Occupations Division office anytime after the completion of courses.
     - Associate Teacher Certificate of Completion
     - Preschool Director Certificate of Completion
     - Family Child Care Certificate of Completion

B. **The Child Development Permit**

   - The permit is granted by the California Commission on Teacher Credentialing and entitles the holder to teach in state and federally funded programs. This is an expanded career choice and has levels of advancement. The Department recommends that all Child Development students aspire to the Child Development Permit. Application for the permit is made through the California Commission on Teacher Credentialing.
     - Assistant Teacher
     - Teacher
     - Master Teacher
     - Site Supervisor

C. **Certificates of Achievement**

   - This is a carefully planned course of classes that will meet requirements of The Department of Social Services and The Child Development Permit as well as when combined with the required general studies classes will lead to an AA Degree in Child Development. This offers even greater career options. Application for the Certificate of Achievement must be made through the Cerritos College Office of Admissions and Records by March 1 of the year you intend to graduate.
     - Certificate of Achievement: Child Development/Early Childhood
     - Certificate of Achievement: Child Development/Preschool Director
     - Certificate of Achievement: Infant/Toddler Teacher
     - Certificate of Achievement: Child Development/School-Age Child Care
     - Certificate of Achievement: Child Development/Special Education
     - Certificate of Achievement: Child Development/Educational Paraprofessional

D. **A.A. Degree – Child Development**

   - This option requires one of the Certificates of Achievement and the required general education courses at Cerritos College. (See college catalogue and counselor). This offers the best career options and prepares the student for transfer to a university. (Please note that classes with a number under 100 do not transfer.) Application for the A.A. degree must be made through the Cerritos College Office of Admissions and Records by March 1 of the year you intend to graduate.
DEPARTMENT SPECIALIZATIONS

A1. ASSOCIATE TEACHER SPECIALIZATION AND CERTIFICATE OF COMPLETION: (12 UNITS)

The following courses meet the minimum educational requirements under Title 22 (Department of Social Services) to qualify the student to be a director of a state licensed preschool or childcare program. The student must have taken the courses within the last five years and must have attained a grade of “C” or higher in each course. In addition, to qualify for this verification, the student must complete three out of four courses at Cerritos College.*

COURSES UNITS
CD 110 Child Development – DS1 3
CDEC 111 Principles and Practices in Early Childhood Education – DS3 3
CDEC 112 Early Childhood Education Curriculum – DS2 3
CDEC 113 The Child, Family and Community – DS2 3

A2. PRESCHOOL DIRECTOR SPECIALIZATION AND CERTIFICATE OF COMPLETION: (15 UNITS)

The following courses meet the minimum educational requirements under Title 22 (Department of Social Services) to qualify the student to be a director of a state licensed preschool or childcare program. The student must have taken the courses within the last five years and must have attained a grade of “C” or higher in each course. In addition, to qualify for this verification, the student must complete three out of four courses at Cerritos College.* For employment, the Department of Social Services (DSS) will also require four years of teaching experience in a preschool or child care program if applicant has only the above minimum education requirements.

These courses alone do not qualify at any level of the Child Development Permit from the California commission of Teacher Credentials.

CORE COURSES UNITS
CD 110 Child Development – DS1 3
CDEC 111 Principles and Practices in Early Childhood Education – DS3 3
CDEC 112 Early Childhood Education Curriculum – DS2 3
CDEC 113 The Child, Family and Community – DS2 3

ADDITIONAL COURSE
CDEC 66 Administration and Supervision of Early Childhood Education Programs – DS6 3

A3. FAMILY CHILD CARE SPECIALIZATION AND CERTIFICATE OF COMPLETION: (9 UNITS)

To qualify for this verification, the student must complete the three courses at Cerritos College. The student must have taken the courses within the last five years and must have attained a grade of “C” or higher in each course.*

COURSES UNITS
CD 110 Child Development 3
CDEC 10 Family Child Care Providers 3
offered Spring semester only
CDEC 161 Nutrition, Health, & Safety in Children’s Programs 3

*TO QUALIFY FOR CREDIT FOR CERTIFICATE OF COMPLETION OR THE CERTIFICATE OF ACHIEVEMENT, COURSES NOT COMPLETED AT CERRITOS COLLEGE MUST BE COMPARABLE IN CONTENT, UNITS, AND GRANTED BY A COLLEGE OR UNIVERSITY ACCREDITED BY THE WESTERN ASSOCIATION OF SCHOOLS AND COLLEGES.

THE CHILD DEVELOPMENT PERMIT

The Child Development Department urges all students to apply for the permit as soon as they have completed six of the core units. After completing additional required units, students should apply for the next level.

For additional information on the Child Development Permit ask for the booklet issued by the California Commission on Teacher Credentialing available in the Health Occupations Division office.

B1. ASSISTANT – THE CHILD DEVELOPMENT PERMIT

This level authorizes the instruction of children under the supervision of a teacher.

COURSES (CHOOSE TWO FROM THE FOLLOWING CLASSES) UNITS
CD 110 Child Development 3
CDEC 111 Principles and Practices in Early Childhood Education 3
CDEC 112 Early Childhood Education Curriculum 3
CDEC 113 The Child, Family, and Community 3

B2. ASSOCIATE TEACHER – THE CHILD DEVELOPMENT PERMIT

This authorizes instruction and supervision of an assistant

COURSES (MUST COMPLETE ALL OF THE CORE COURSES) UNITS
CD 110 Child Development 3
CDEC 111 Principles and Practices in Early Childhood Education 3
CDEC 112 Early Childhood Education Curriculum 3
CDEC 113 The Child, Family, and Community 3

B3. TEACHER - THE CHILD DEVELOPMENT PERMIT

The following courses meet the requirements for the California Commission on Teacher Credentialing that are required to teach in state and federally funded programs for young children or any privately funded programs that also require the Child Development Permit.

COURSES UNITS
CD 110 Child Development 3
CDEC 111 Principles and Practices in Early Childhood Education 3
CDEC 112 Early Childhood Education Curriculum 3
CDEC 113 The Child, Family, and Community 3
CDEC 164 Early Childhood Education Practicum 3

The student must also choose and complete an additional 12 units from the Certificate of Achievement in Child Development requirements to meet the required total of 24 units in Child Development.

The student must also complete 16 units in general education in the areas stated: English/Language Arts, Math or Science, Social Sciences, Humanities and/or Fine Arts. Also note that for the permit there is a required experience period.

B4. MASTER TEACHER – THE CHILD DEVELOPMENT PERMIT

Requires all that is stated above in Teacher description plus the following:

CDEC 230 – Adult Supervision in Child Care Program
6 units of specialization – please see a full-time faculty member in Child Development for advisement
Also note a more extensive experience period is required.
B5. SITE SUPERVISOR – THE CHILD DEVELOPMENT PERMIT

Requires an AA degree or 60 units, which must include the following courses. If the AA does not include the following courses then these course must be taken in addition:

**COURSES**                  **UNITS**
CD 110  Child Development – DS1 3
CDEC 111 Principles and Practices in Early Childhood Education - DS3 3
CDEC 112 Early Childhood Education Curriculum – DS3 3
CDEC 113 The Child, Family and Community – DS2 3

Twelve additional Child Development units (choose from Certificate of Achievement – Early Childhood list)

**COURSES**                  **UNITS**
CDEC 66 Administration of Early Childhood Programs 3
CDEC 67 Advanced Administration of Early Childhood Programs 3
CDEC 230 Adult Supervision in Child Care Programs 3

Please note the required Experience Period.

CHILD DEVELOPMENT CERTIFICATES OF ACHIEVEMENT

C1. CERTIFICATE OF ACHIEVEMENT: CHILD DEVELOPMENT/EARLY CHILDHOOD

In order to receive the Certificate of Achievement, all courses must be completed with a grade of “C” or higher.

**NOTE: APPLICATION FOR CERTIFICATE OF ACHIEVEMENT MUST BE MADE AT THE OFFICE OF ADMISSIONS AND RECORDS.**

**COURSES**                  **UNITS**
CD 110  Child Development – DS1 3
CD 124  The Child in a Diverse Society – DS3C 3
CD 139  Observation, Assessment, and Positive Guidance of Childhood Behavior 3
CDEC 111 Principles and Practices in Early Childhood Education – DS3 3
CDEC 112 Early Childhood Education Curriculum – DS3 3
CDEC 113 The Child, Family, and Community – DS2 3
CDEC 161 Nutrition, Health & Safety in Children’s Programs – DS3 3
CDEC 62 Exploring Creative Art Expression By Children – DS3 3
CDEC 63 Early Childhood Experiences in Language Arts and Social Sciences - DS3 3
or CDEC 134 Heads Up Reading – A, B 2
CDEC 164 Early Childhood Education Practicum – DS3 3
CDEC 65 Music and Movement for Children – DS3 3
CDEC 133 Early Childhood Experiences in Math and Sciences – DS3 2
*CDEC 173 Early Childhood Education Occupational Work Experience – DS3 3
or CDEC 174 Early Childhood Education Occupational Work Experience DS3 4

Choose from the following for a total of 3 units:
CDIT 151 Infant and Toddler Development 3
CDIT 152 Infant and Toddler Programs 3
CDSA 155 School-Age Child Care Activities – DS5 3
CDSE 50 Survey of Special Education 3

CDSE 52 Special Education Inclusion in Early Childhood Programs 3
CDEC 230 Adult Supervision in Child Care Programs 3

**TOTAL CERTIFICATE REQUIREMENTS** 41/42

*Students must be concurrently enrolled in a minimum of seven units in CDEC, including work experience. CDEC 173 requires that you work or volunteer a minimum of 15 hours per week and CDEC 174 requires that you work or volunteer a minimum of 20 hours per week in a program for young children. Work Experience classes may be taken more than one semester.

C2. CERTIFICATE OF ACHIEVEMENT: CHILD DEVELOPMENT/PRESCHOOL DIRECTOR

**NOTE: APPLICATION FOR CERTIFICATE OF ACHIEVEMENT MUST BE MADE AT THE OFFICE OF ADMISSIONS AND RECORDS**

Students must complete the Certificate of Achievement requirements listed in Child Development/Early Childhood and the following courses:

**COURSES**                  **UNITS**
Certificate of Achievement in Child Development/Early Childhood 41/42
CDEC 66 Administration and Supervision of Early Childhood Education Programs – DS6 3
CDEC 67 Adv. Administration and Supervision of Early Childhood Education Programs – DS6 3
CDEC 230 Adult Supervision on Child Care Programs 3

**TOTAL CERTIFICATE REQUIREMENTS** 50/51

C3. CERTIFICATE OF ACHIEVEMENT: SCHOOL-AGE CHILDCARE

The following courses meet the minimum educational requirements for the Department of Social Services for school-age child caregivers. The student must have attained a grade of “C” or higher in each course.

**COURSES**                  **UNITS**
CD 110  Child Development – DS1 3
CD 115  Parent School Partnership 3
CDEC 62  Exploring Creative Art Expression by Children – DS3 3
CDEC 161 Nutrition, Health & Safety in Children’s Programs – DS7 3
CDEC 63 Early Childhood Experiences in Language Arts and Social Sciences – DS3 3
CDEC 113 The Child, Family, and community – DS2 3
CDSA 152 School-Age Child Care Supervision and Administration – DS6 3
CDSA 155 School-Age Child Care Activities – DS5 3
CDSA 259 School-Age child Care Practicum – DS5 3

**TOTAL CERTIFICATE REQUIREMENTS** 27

C4. CERTIFICATE OF ACHIEVEMENT: INFANT/TODDLER TEACHER

The following courses meet the minimum educational requirements for the Department of Social Services for infant/toddler caregivers. The student must have attained a grade of “C” or higher in each course.

**COURSES**                  **UNITS**
CD 110  Child Development – DS1 3
CD 124  The Child in a Diverse Society 3
CDEC 161 Nutrition, Health and Safety in Children’s Programs 3

86
CDEC 111 Principles and Practices in Early Childhood Education – DS 3
CDEC 112 Early Childhood Education Curriculum – DS 3
CDEC 113 The Child, Family and Community – DS 2
CDIT 151 Infant and Toddler Development
CDIT 152 Infant and Toddler Programs

TOTAL CERTIFICATE REQUIREMENTS: 24

C5. CERTIFICATE OF ACHIEVEMENT: CHILD DEVELOPMENT/SPECIAL EDUCATION

NOTE: APPLICATION FOR CERTIFICATE OF ACHIEVEMENT MUST BE MADE AT THE OFFICE OF ADMISSIONS AND RECORDS

COURSES UNITS
CD 110 Child Development 3
CD 124 The Child in a Diverse Society 3
CD 139 Observation, Assessment and Positive Guidance of Childhood Behavior 3
CDEC 62 Exploring Creative Art Expression by Children – DS 3
CDSE 50 Survey of Special Education
CDSE 52 Special Education Inclusion in Early Childhood Programs
CDEC 133 Early Childhood Experiences in Math and Sciences
SL 101 Beginning American Sign Language 3
PSYC 101 General Introductory Psychology 3
HO 150 Emergency and Safety Management 3
*CD 73/74 Special Education Assistant Occupational Work Experience 3 - 4

TOTAL CERTIFICATE REQUIREMENTS: 32/33

*Students must be concurrently enrolled in a minimum of seven units in CDEC, including work experience. CD 73 requires that you work or volunteer a minimum of 15 hours per week and CD 74 requires that you work or volunteer a minimum of 20 hours per week in a program for young children. Work Experience classes may be taken more than one semester.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

Meet the requirements for a Certificate of Achievement in Special Education Assistant. Plus, for an A.A. Degree, a student must take SL 102, electives and general education requirements to achieve a minimum of 60 units.

C6 CERTIFICATE OF ACHIEVEMENT: EDUCATIONAL PARAPROFESSIONAL COURSES

COURSES UNITS
CDIA 90 Introduction to Elementary and Secondary Classroom Experience 3
*CDIA 99 Instructional Aide Practicum 3
CD 110 Children Development 3
CD 115 Parent School Partnerships 3
CD 124 The Child in a Diverse Society 3
CD 139 Observation, Assessment and Positive Guidance of Childhood Behavior 3
CDEC 62 Exploring Creative Art Expression by Children – DS 3
CDSE 50 Survey of Special Education
CDSE 52 Special Education Inclusion in Early Childhood Programs
EDT 52 Windows for Educators 1
EDT 110 Introduction to Educational Technology 2

TOTAL CERTIFICATE REQUIREMENTS: 30

CIDA 99 requires of the student 6 hours per week in a school environment, normally during daytime hours.

*If currently employed as an Educational Paraprofessional, enroll in CIDA 73, CIDA 74, CDSE 73 or CDSE 74.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement for Educational Paraprofessional. Plus, for an A.A. Degree, a student must complete electives and general education requirements to achieve a minimum of 60 units.

See Cerritos College Graduation Requirements.

CAREER OPPORTUNITIES: Employment as an Educational Paraprofessional in a classroom situation.

ASSOCIATE IN ARTS DEGREE: CHILD DEVELOPMENT

D1. ASSOCIATE IN ARTS DEGREE:

Meet the requirements for a Certificate of Achievement. Plus, for an AA Degree a student must complete PSYCH 101 and general education requirements to achieve a minimum of 60 units.

RECOMMENDED ELECTIVES: CDSE 50, CD 50, CDIT 151, CDIT 152, CDSE 52, CDSE 155, CDPE 10, EDT 52, EDT 100, EDT 104

See Cerritos College Graduation Requirements. Students need advisement from a Cerritos College counselor for general education requirements.

COMPUTER AND INFORMATION SCIENCES PROGRAMS

COMPUTER AND INFORMATION SCIENCES NETWORKING TECHNICIANS/OPERATORS CERTIFICATE OF ACHIEVEMENT

REQUIRED COURSES UNITS
CIS 70A Networking Fundamentals 3.5
CIS 70B Local Area Networks 3.5
CIS 70D Introduction to TCP/IP 1.5
CIS 70E Router Configuration and Protocols 3.5
CIS 70F Advanced Switching and Routing 3.5
CIS 70G Wide Area Networks 3.5

Choose 10.5 units from the following courses:
CIS 58A Windows for the COMPTIA A+ Certification Exam 3.5
CIS 75 SQL Administration 3
CIS 141 AS/400 Operations 3
CIS 105 Using Microsoft Windows 1.5
CIS 201 Systems Analysis and Design 3
CIS 205 Programming HTML for the Web 1.5
CIS 212A Microsoft Windows 2000 Professional 3.5
CIS 212B Microsoft Windows 2000 Server 3.5
CIS 213 Microsoft Windows Directory Services 3.5
CIS 214 Unix 3
CIS 215B Solaris Administration I 3.5
CIS 215C Solaris Administration II 3.5

TOTAL CERTIFICATE REQUIREMENTS: 29.5
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements of a Certificate of Achievement in Computer and Information Sciences Network Technicians/Operators certificate and complete general education requirements and electives to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this certificate/A.A. Degree is nontransferable.

See Cerritos College graduation requirements.

COMPUTER AND INFORMATION SCIENCES OPERATOR CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS UNITS
CIS 52* Data Processing Mathematics 3
CIS 102 Introduction to Microcomputer Hardware and Applications Software 3
CIS 101 Introduction to Computer Information Systems (3)
CIS 141L AS/400 Operations 3
CIS 141A Operate iSeries (AS/400) using Operations Navigator1.5
CIS 240 AS/400 Control Language Programming 3
BCOM 147** Business Communications 3
or ENGL 52** Introduction to College Composition (3)
or ENGL 100** Freshman Composition (3)
or ENGL 155** Technical Writing (3)
Choose from the following for a total of (15) units:
BCOT 52 Data Entry 2
CIS 70A Networking Fundamentals 3
CIS 75 SQL/Administration 3
CIS 105 Using Microsoft Windows 1.5
CIS 121 Introduction to Internet 1.5
CIS 125 Introduction to Internet for Information Systems/Information Technology 1.5
CIS 140 Query/400 1
CIS 141L AS/400 Operations 3
CIS 171 Visual Basic Programming 3
CIS 171A Advanced Visual Basic Programming 3
CIS 175 RPG Programming 3
CIS 186 Visual Basic.NET Programming (3)
CIS 180 Programming in C/C++ 3
CIS 201 Systems Analysis and Design 3
CIS 205 Programming in HTML for the World Wide Web 1.5
CIS 206 XML Scripting 1.5
CIS 207 Database Design and SQL 3.5
CIS 208A Oracle SQL and PL/SQL Programming (3.5)
CIS 208B Oracle Database Applications (3.5)
CIS 212 Windows 2000 Professional and Server 3
CIS 214 Unix 3
CIS 215A Solaris Fundamentals 3.5
CIS 215B Advanced Solaris 3
CIS 215L Advanced Unix Programming 3
CIS 221 Solaris Fundamentals 3.5
CIS 221B Advanced Unix Programming 3
CIS 222 Advanced RPG Programming 3.5
CIS 223 VisualAge RPG 3
CIS 224 Advanced COBOL Programming 3
CIS 271/272/273/274 CIS Occupational Work Experience 1/2/3/4
CIS 280 Object-Oriented Programming in C++ 3
CIS 281 Windows Programming with Visual C#.NET 3
CIS 282 Advanced Java Programming 3.5

TOTAL CERTIFICATE REQUIREMENTS: 33

*Meets general education requirement, may substitute MATH 60
**Meets A.A. Degree general education requirements.

NOTE: CIS 52, 101, 102, or 103 meet A.A. degree general education communication and analytic thinking requirement.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Computer and Information Sciences Operator and complete general education requirements and electives to achieve a minimum of 60 units.

See Cerritos College Graduation Requirements.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 283A</td>
<td>Java Server Pages (JSP) Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 284</td>
<td>CGI and PERL Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 285</td>
<td>Active Server Pages Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 285A</td>
<td>Active Server Pages.NET Programming</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 36.5/38

*Meets A.A. Degree General Education – “Communication and Analytical Thinking” requirement. MATH 60 may be substituted.

**Meets A.A. Degree General Education – “English Composition” requirement.

NOTE: CIS 52, 101, 102, and 103 meet A.A. Degree General Education – “Communication and Analytic Thinking” requirement and the “A.A. Math Proficiency” requirement.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement in Computer and Information Sciences Programmer and complete general education requirements and electives to achieve a minimum of 60 units.

See Cerritos College Graduation Requirements.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

Please see counselors or the respective department for additional alternatives.

**COMPUTER AND INFORMATION SCIENCES**

**SYSTEMS ANALYST CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 52*</td>
<td>Data Processing Mathematics 3</td>
</tr>
<tr>
<td>CIS 70A</td>
<td>Network Fundamentals 2.5</td>
</tr>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems 3</td>
</tr>
<tr>
<td>or CIS 102</td>
<td>Introduction to Microcomputer Hardware and Applications Software (3)</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic 3.5</td>
</tr>
<tr>
<td>CIS 151</td>
<td>Microsoft Excel for IS/IT 3.5</td>
</tr>
<tr>
<td>CIS 201</td>
<td>Systems Analysis and Design 3</td>
</tr>
<tr>
<td>CIS 202A</td>
<td>Project Management for IT 1.5</td>
</tr>
<tr>
<td>CIS 207</td>
<td>Database Design and SQL Programming 3</td>
</tr>
<tr>
<td>or CIS 208A</td>
<td>Oracle SQL and PL/SQL (3)</td>
</tr>
<tr>
<td>or CIS 80</td>
<td>Programming in Access (3)</td>
</tr>
<tr>
<td>BCOM 147**</td>
<td>Business Communications 3</td>
</tr>
</tbody>
</table>

Choose **6 units from the following courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 56</td>
<td>Microcomputer Disk Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 141</td>
<td>AS/400 Operations</td>
<td>3</td>
</tr>
<tr>
<td>CIS 186</td>
<td>Visual Basic.NET Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 212</td>
<td>Windows 2000 Professional and Server</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose **6 units from the following courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 121</td>
<td>Introduction to Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>or CIS 126</td>
<td>JavaScript for Non-Programmers</td>
<td>3</td>
</tr>
<tr>
<td>CIS 141</td>
<td>AS/400 Operations</td>
<td>3</td>
</tr>
<tr>
<td>CIS 155</td>
<td>Microsoft Access</td>
<td>3</td>
</tr>
<tr>
<td>CIS 175</td>
<td>RPG Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 186</td>
<td>Visual Basic.NET Programming</td>
<td>3.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 205</td>
<td>Programming in HTML for the World Wide Web</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 206</td>
<td>XML Scripting</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 212</td>
<td>Windows 2000 Professional and Server</td>
<td>3</td>
</tr>
<tr>
<td>CIS 222</td>
<td>Advanced RPG Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 223</td>
<td>Visual RPG</td>
<td>3</td>
</tr>
<tr>
<td>CIS 271/272</td>
<td>CIS Occupational Work Experience</td>
<td>1/2/3/4</td>
</tr>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 281</td>
<td>Windows Programming w/Visual C#.NET</td>
<td>3</td>
</tr>
<tr>
<td>CIS 285A</td>
<td>ASPNET Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 37.5

*Meets A.A. general education requirement, may substitute MATH 60

**Meets A.A. general education requirement, may substitute ENGL 100

NOTE: CIS 52, 101, 102, or 103 meet A.A. Degree general education communication and analytic thinking.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for Certificate of Achievement in Computer and Information Sciences-Systems Analyst. Complete general education requirements and electives to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

Please see counselors or the respective department for additional alternatives.

COMPUTER AND INFORMATION SCIENCES

**MICROCOMPUTER SPECIALIST CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 52*</td>
<td>Data Processing Mathematics 3</td>
</tr>
<tr>
<td>BCOT 96</td>
<td>Microsoft PowerPoint Core/Expert 1.5</td>
</tr>
<tr>
<td>BCOT 117</td>
<td>Introduction to Desktop Publishing Microsoft Publisher 1.5</td>
</tr>
<tr>
<td>CIS 56</td>
<td>Microcomputer Disk Operating Systems 3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Microcomputer Hardware and Applications Software 3</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic 3.5</td>
</tr>
<tr>
<td>CIS 105</td>
<td>Using Microsoft Windows 1.5</td>
</tr>
<tr>
<td>CIS 151</td>
<td>Microsoft Excel for Information Systems/Information Technology 3.5</td>
</tr>
<tr>
<td>CIS 155</td>
<td>Microsoft Access 3</td>
</tr>
<tr>
<td>CIS 171</td>
<td>Visual Basic Programming 3</td>
</tr>
<tr>
<td>BCOM 147**</td>
<td>Business Communications 3</td>
</tr>
<tr>
<td>or ENGL 52**</td>
<td>Introduction to College Composition (3)</td>
</tr>
<tr>
<td>or ENGL 100**</td>
<td>Freshman Composition (3)</td>
</tr>
<tr>
<td>or ENGL 155**</td>
<td>Technical Writing (3)</td>
</tr>
</tbody>
</table>

Choose **9 units from the following courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOT 96</td>
<td>Microsoft PowerPoint Core/Expert</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 117</td>
<td>Introduction to Desktop Publishing Microsoft Publisher 1.5</td>
<td></td>
</tr>
<tr>
<td>CIS 58</td>
<td>Windows for A+ Certification</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 70A</td>
<td>Network Fundamentals</td>
<td>2.5</td>
</tr>
<tr>
<td>CIS 121</td>
<td>Introduction to Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 182</td>
<td>Java Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 201</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 205</td>
<td>Programming in HTML for the World Wide Web</td>
<td>1.5</td>
</tr>
</tbody>
</table>
CIS 206  XML Programming  1.5
CIS 212  Windows 2000 Professional Server  3
CIS 214  Unix  3
CIS 271/272/273/274  CIS Occupational Work Experience  1/2/3/4
CIS 280  Object-Oriented Programming in C++  3

TOTAL CERTIFICATE REQUIREMENTS:  35

*Meets A.A. Degree general education requirement, may substitute MATH 60
**Meets A.A. Degree general education requirement.

NOTE: CIS 52, 102, or 103 meets A.A. Degree general education communication and analytic thinking requirement.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for Certificate of Achievement in Computer and Information Sciences Microcomputer Specialist and complete general education requirements and electives to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this Certificate/A.A. Degree is nontransferable.

Please see counselors or the respective department for additional alternatives.

SOFTWARE DEVELOPMENT IN JAVA CERTIFICATE OF COMPLETION

REQUIRED COURSES  UNITS
CIS 103  Computer Programming Logic  3.5
CIS 182  Java Programming  3.5
CIS 282  Advanced Java Programming  3.5
CIS 283A  Java Server Pages (JSP) Programming  3.5

TOTAL CERTIFICATE REQUIREMENTS  14

A certificate of completion in the Software Development in Java Certificate of Completion will be granted by the division upon completion of 14 units.

SOFTWARE DEVELOPMENT IN C++/VISUAL C# CERTIFICATE OF COMPLETION

REQUIRED COURSES  UNITS
CIS 103  Computer Programming Logic  3.5
CIS 180  Programming in C/C++  3.5
CIS 280  Object-Oriented Programming in C++  3
CIS 281  Windows Programming with Visual C#.NET  3
CIS 292  Data Structures  3.5

TOTAL CERTIFICATE REQUIREMENTS  16.5

A Certificate of completion in the Software Development in C++/Visual C# Certificate of Completion will be granted by the division upon completion of 16.5 units.

IBM ISERIES 400 SERVER OPERATIONS CERTIFICATE OF COMPLETION

REQUIRED COURSES  UNITS
CIS 103  Computer Programming Logic  3.5
CIS 141  iSeries 400 Operation  3
CIS 141A  Operations Navigator  1.5
CIS 240  Control Language Programming  3

TOTAL CERTIFICATE REQUIREMENTS  11
A certificate of completion in the IBM iSeries 400 Operations Certificate of Completion will be granted by the division upon completion of 11 units.

SOFTWARE DEVELOPMENT IN DATABASE APPLICATION CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 186</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 207</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 221B</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS 13.5

A certificate of completion in the Software Development Database Application Certificate of Completion will be granted by the division upon completion of 13.5 units.

LINUX APPLICATION PRODUCTIVITY CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 85</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 101</td>
<td>3</td>
</tr>
<tr>
<td>CIS 214</td>
<td>3.5</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS 10

A certificate of completion in the Linux Application Productivity Certificate will be granted by the division upon completion of 10.5 units.

MICROSOFT SYSTEMS ADMINISTRATOR CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 212</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 212A</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 213A</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 213B</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 213F</td>
<td>3.5</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS 17.5

A certificate of completion in the Microsoft Systems Administrator Certificate will be granted by the division upon completion of 17.5 units.

NETWORK ADMINISTRATOR CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 70A</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 70B</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 70D</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 70E</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 70F</td>
<td>3.5</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS 15.5

A certificate of completion in the Network Administration Certificate of Completion will be granted by the division upon completion of 15.5 units.

UNIX ADMINISTRATION CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 214</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 215B</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 215C</td>
<td>3.5</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS 10.5

A certificate of completion in the Unix Administration Certificate of Completion will be granted by the division upon completion of 10.5 units.

COMPUTER INFORMATION SYSTEMS ANALYST CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 186</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 201</td>
<td>3</td>
</tr>
<tr>
<td>CIS 202A</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 207</td>
<td>3.5</td>
</tr>
<tr>
<td>or CIS 208A</td>
<td>3.5</td>
</tr>
<tr>
<td>or CIS 80</td>
<td>3.5</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS 15

A certificate of completion in the Computer Information Systems Analyst Certificate of Completion will be granted by the division upon completion of 15 units.

DATABASE APPLICATION DEVELOPMENT FOR MICROSOFT ACCESS CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 80</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 103</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 155</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 186</td>
<td>3.5</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS 14

NOTE: CIS 103 can be replaced by CIS 180 or CIS 182 with the approval of the certificate advisor. A certificate of completion in the Database Application Development for Microsoft Access Certificate of Completion will be granted by the division upon completion of 14 units.
**CYBER SECURITY CERTIFICATE OF COMPLETION**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 70A</td>
<td>Network Fundamentals</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 70K</td>
<td>Wireless Network</td>
<td>3</td>
</tr>
<tr>
<td>CIS 70L</td>
<td>Network Security Fundamentals</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 72B</td>
<td>Special Topics in Security</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 213H</td>
<td>Microsoft Windows Security</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS**

17 units

A certificate of completion in the Cyber Security Certificate will be granted by the division upon completion of 17 units.

**A+ CERTIFICATION PREPARATION CERTIFICATE OF COMPLETION**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 58A</td>
<td>PC Operating System A+ Certification</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 58B</td>
<td>PC Core Hardware A+ Certification</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS**

7 units

A certificate of completion in the A+ Certification Preparation Certificate will be granted by the division upon completion of 7 units.

**WEB SERVER DEVELOPMENT CERTIFICATE OF COMPLETION**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 186</td>
<td>Visual Basic.NET Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 205</td>
<td>Programming in HTML</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 285A</td>
<td>ASP.NET Programming</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS**

12 units

A certificate of completion in the Web Server Development Certificate of Completion will be granted by the division upon completion of 12 units.

**WEB CLIENT DEVELOPMENT CERTIFICATE OF COMPLETION**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 125</td>
<td>JavaScript for Programmer</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 205</td>
<td>Programming in HTML</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 206</td>
<td>XML Scripting</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS**

8 units

A certificate of completion in the Web Client Development Certificate of Completion will be granted by the division upon completion of 8 units.

**SOFTWARE DEVELOPMENT IN VISUAL BASIC.NET CERTIFICATE OF COMPLETION**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 186</td>
<td>Visual Basic.NET Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 221A</td>
<td>Object-Oriented Programming in VB.NET</td>
<td>3</td>
</tr>
<tr>
<td>CIS 221B</td>
<td>Database Programming in VB.NET</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS**

13 units

A certificate of completion in the Software Development in Visual Basic.NET Certificate of Completion will be granted by the division upon completion of 13 units.

**SOFTWARE DEVELOPMENT IN THE UNIX/LINUX ENVIRONMENT CERTIFICATE OF COMPLETION**

**REQUIRED COURSE UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 181A</td>
<td>Unix Programming in C/C++</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 214</td>
<td>Unix/Linux Fundamentals</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS**

14 units

A certificate of completion in the Software Development in the Unix/Linux Environment Certificate of Completion will be granted by the division upon completion of 14 units.

**COMPUTER SCIENCE TRANSFER PROGRAM**

**LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS**

NOTE: Computer Science is a rapidly changing field. Contact a Cerritos College Counselor in order to optimize preparation for transfer.

**COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

**California State University - Dominguez Hills**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 230</td>
<td>Assembly Programming for Microcomputers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**California State University - Long Beach**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 182</td>
<td>JAVA Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 280</td>
<td>Object-Orientated Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>
California State University - Los Angeles

ENGL 103 Critical and Argumentative Writing 3
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
PHYS 203 Engineering Physics 4

California State University - Fullerton

BIOL 120 Introduction to Biological Sciences 4
CIS 214 Unix 3
CIS 230 Assembly Programming for Microcomputers 4
CIS 292 Data Structures 3.5

One of the following Physical Science Combinations:
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
or CHEM 111 General Chemistry (5)
CHEM 112 General Chemistry (5)
or GEO 101 The Earth & Environment (4)
GEO 201 Earth History (4)

California State Polytechnic University - Pomona

CIS 182 JAVA Programming 3.5
CIS 230 Assembly Programming for Microcomputers 4
CIS 282 Advanced JAVA Programming 3.5
CIS 292 Data Structures 3.5
CHEM 111 General Chemistry 5
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
PHYS 203 Engineering Physics 4

Recommended Courses
MATH 220 Analytical Geometry and Calculus III 4

University of California - Irvine

(College of Information and Computer Science)
CIS 280 Object-Oriented Programming in C/C++ 3
CIS 182 Java Programming 3.5
CIS 292 Data Structures 3.5

One of the following Science combinations:
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
or PHYS 201 Engineering Physics (4)
PHYS 203 Engineering Physics (4)
or CHEM 111 General Chemistry (5)
CHEM 112 General Chemistry (5)
or BIOL 201 Principles of Biology (5)
BIOL 202 Molecular Biology/Genetics (4)

University of California - Los Angeles

CIS 180 Programming in C/C++ 3
or CIS 280 Object-Oriented Programming in C++ (3)
CIS 230 Assembly Programming for Microcomputers 4
CIS 292 Data Structures 3.5
MATH 220 Analytical Geometry and Calculus III 4
MATH 240 Calculus and Differential Equations 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
PHYS 203 Engineering Physics 4
ENGL 100 Freshman Composition 4
and ENGL 102 Freshman Composition and Literature 3
or ENGL 103 Critical Argumentative Writing (3)
or PHIL 202 Critical Thinking and Argumentative Writing (3)
or PSYC 103 Critical Thinking in Psychology (3)
or SPCH 235 Fundamentals of Argumentation and Persuasion (3)

Four courses from across the following categories: Humanities and/or Social Sciences. Contact counselor for assistance in selecting these courses.

ASSOCIATE IN ARTS REQUIREMENTS:
Complete the 60 units to include (1) Math 170, 190, Phys 201, CIS 180, 280. (2) The Associate in Arts general education degree requirements.

CAREER OPPORTUNITIES: Computer science graduates are primarily prepared for the area of software design. Graduates usually are recruited by hardware manufacturers and are then involved in the design of vendor supplied software, such as compilers, operating systems, and utility programs.

See Cerritos College Graduation Requirements.
See State University General Education List.

COSMETOLOGY

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements of a Certificate of Achievement in Cosmetology.

Additional coursework will be necessary to complete Cerritos College Graduation Requirements and achieve the minimum of 60 units.

The cosmetology curriculum consists of a minimum of 1600 clocked hours of cosmetology class work. The curriculum prepares the student for the State Board of Cosmetology Examination.

Students enrolling in the Cosmetology Program should contact the Cosmetology Department or a Cosmetology counselor for information regarding the cost of the kit, uniforms, and books.

Students may complete the Cosmetology Program by enrolling in one of the following plans:
FULL TIME--DAYS: The full-time day student may complete the 1600-hour program by (1) two regular semesters and one eight-week summer session over a period of one calendar year, or (2) three regular semesters over a period of one and one-half years.

EVENINGS: Students enrolling in this plan attend class 5:30 p.m.-10:30 p.m. Monday through Thursday. It requires approximately five or six semesters to complete the 1600-hour program.

MAJOR REQUIREMENTS

FULL TIME (8:30 a.m. to 5:00 p.m. Monday through Friday)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 50A</td>
<td>Introductory Cosmetology I</td>
</tr>
<tr>
<td>COS 50B</td>
<td>Introductory Cosmetology II</td>
</tr>
<tr>
<td>COS 50C</td>
<td>Introductory Cosmetology III</td>
</tr>
<tr>
<td>COS 51A</td>
<td>Intermediate Cosmetology I</td>
</tr>
<tr>
<td>COS 51B</td>
<td>Intermediate Cosmetology II</td>
</tr>
<tr>
<td>COS 51C</td>
<td>Intermediate Cosmetology III</td>
</tr>
<tr>
<td>COS 52A</td>
<td>Advanced Cosmetology I</td>
</tr>
<tr>
<td>COS 52B</td>
<td>Advanced Cosmetology II</td>
</tr>
<tr>
<td>COS 52C</td>
<td>Advanced Cosmetology III</td>
</tr>
</tbody>
</table>

58.50

PART TIME--EVENING (5:30-10:30 p.m. Monday through Thursday)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 60A</td>
<td>Introductory Cosmetology Theory &amp; Manipulation</td>
</tr>
<tr>
<td>COS 60B</td>
<td>Introductory Cosmetology II</td>
</tr>
<tr>
<td>COS 61A</td>
<td>Intermediate Cosmetology I</td>
</tr>
<tr>
<td>COS 61B</td>
<td>Intermediate Cosmetology II</td>
</tr>
<tr>
<td>COS 62A</td>
<td>Advanced Cosmetology I</td>
</tr>
<tr>
<td>COS 62B</td>
<td>Advanced Cosmetology II</td>
</tr>
</tbody>
</table>

60
COS 53 may be repeated for a maximum of 19.5 units as necessary to complete the 1600 hours required by the State Board of Cosmetology.

Vocational and Professional Opportunities at Completion of Program and after obtaining the Cosmetologist License: Cosmetologist, manager of a salon, hairstylist, owner of a salon, makeup artist, cosmetic demonstrator, tint technician.

See Cerritos College Graduation Requirements.

THE CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 50A</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 50B</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 50C</td>
<td>6.5</td>
</tr>
<tr>
<td>or COS 70A</td>
<td>(8.0)</td>
</tr>
<tr>
<td>COS 51A</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 51B</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 51C</td>
<td>6.5</td>
</tr>
<tr>
<td>or COS 70B</td>
<td>(8.0)</td>
</tr>
</tbody>
</table>

MINIMUM UNITS REQUIRED: 58.50

MINIMUM HOURS REQUIRED: 1600

*Part-time day or evening students will substitute COS 60A, 60B, 61A, 61B, 62A, 62B for COS 50A, 50B, 50C, 51A, 51B, 51C, 52A, 52B, 52C.

Also, part-time evening students will substitute COS 71A, 71B, 71C for COS 70A, 70B, 70C.

COS 53 may be repeated for a maximum of 19.5 units as necessary to complete the 1600 hours required by the Bureau of Barbering and Cosmetology.

Employment Opportunities upon Completion of the Program: Hair Stylist or Hair Technician.

ESTHETICIAN PROGRAM

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

The completion of 60 units to include: 1) courses for completion of the Certificate of Achievement in Esthetics, 2) General education course requirements, Stage Make-up (TH 123), and electives as needed.

RECOMMENDED ELECTIVES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 100</td>
<td>3</td>
</tr>
<tr>
<td>BA 111</td>
<td>3</td>
</tr>
<tr>
<td>BA 114</td>
<td>3</td>
</tr>
<tr>
<td>BA 117</td>
<td>3</td>
</tr>
<tr>
<td>BA 121</td>
<td>3</td>
</tr>
<tr>
<td>BA 153</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 114</td>
<td>3.5</td>
</tr>
<tr>
<td>BUSA 60</td>
<td>1.5</td>
</tr>
<tr>
<td>TH 123</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE UNITS: 32.5

CAREER OPPORTUNITIES: Employment in the beauty and cosmetic industry as a professional esthetician, treatment therapist, business owner, and product educator.

CERTIFICATE OF ACHIEVEMENT

The Esthetician curriculum consists of a minimum of 600 clock hours of esthetic class work. The curriculum prepares the student for the State Board of Cosmetology Examination for Esthetician. Students enrolling in the esthetician Program should contact the Cosmetology Department or a cosmetology counselor for information regarding the cost of the kit, uniforms, and books.

Students may complete the Esthetician program PART-TIME – DAYS: the student may complete the 600-hour program by attending two regular semesters and attend class from 11:30 a.m. – 4:30 p.m. Monday through Thursday. EVENINGS: Students enrolling in this plan attend class 3:30 p.m. – 10:30 p.m. Monday through Thursday. It requires two regular semesters to complete the 600 – hours program.

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 54</td>
<td>10</td>
</tr>
<tr>
<td>COS 54A</td>
<td>10</td>
</tr>
</tbody>
</table>

VOCA TIONAL AND PROFESSIONAL OPPORTUNITIES AT COMPLETION OF PROGRAM AND AFTER OBTAINING THE ESTHETICIAN LICENSE:

Day salon or spa owner, distributors and manufacturers of specialty skin care, product educators, make-up artist on movie sets, television and theaters. Licensed Estheticians who are interested in working in a medical setting are highly desired by plastic surgeons and dermatologists as freelance Estheticians or as paramedical Estheticians.

COURT REPORTING—SEE BUSINESS COURT REPORTING

CULINARY ARTS--CHEF’S TRAINING

CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 52</td>
<td>9.5</td>
</tr>
<tr>
<td>CA 53</td>
<td>9.5</td>
</tr>
<tr>
<td>CA 54</td>
<td>9.5</td>
</tr>
<tr>
<td>CA 60</td>
<td>3</td>
</tr>
<tr>
<td>CA 101</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE UNITS: 32.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

Complete 60 units to include (1) the above requirements for the Certificate of Achievement, (2) the Associate in Arts Degree requirements, and (3) electives as needed.

Additional Expenses: Students will be required to purchase a set of knives and two sets of uniforms.

CAREER OPPORTUNITIES: Employment in the food service industry as sous chef, chef steward. Also short order cook, pantry person, grade helper, roast cook.

See Cerritos College Graduation Requirements.
CULINARY ARTS--PROFESSIONAL BAKING AND PASTRY

CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 60</td>
<td>Foods Purchase and Control</td>
<td>3</td>
</tr>
<tr>
<td>CA 80</td>
<td>Introduction to Baking Skill</td>
<td>4</td>
</tr>
<tr>
<td>CA 81</td>
<td>Professional Baking &amp; Pastry Production I</td>
<td>5</td>
</tr>
<tr>
<td>CA 82</td>
<td>Professional Baking &amp; Pastry Production II</td>
<td>5</td>
</tr>
<tr>
<td>CA 101</td>
<td>Introduction to Food Service Safety &amp; Sanitation</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE UNITS: 18

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the above requirements for Certificate of Achievement. Plus for an A.A. Degree the student must complete the A.A. Degree general education requirements and electives to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: Employment as a professional baker, pastry chef, pastry cook, and specialty baker.

DANCE TRANSFER PROGRAM

The Dance Department provides a major of study with emphasis in Modern, Jazz and Ballet techniques, composition and performance. It gives the General Education student and the student in closely related areas, experience in dance as an art form.

The following core of courses will provide the dance student with a solid background for upper division work and a transfer curriculum. See Counselor for details.

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY AND FOR THE UNIVERSITY OF CALIFORNIA

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 182A</td>
<td>Modern Dance (Beginning)</td>
<td>2</td>
</tr>
<tr>
<td>PE 182B</td>
<td>Modern Dance (Intermediate)</td>
<td>2</td>
</tr>
<tr>
<td>PE 186A</td>
<td>Ballet (Beginning)</td>
<td>2</td>
</tr>
<tr>
<td>PE 186B</td>
<td>Ballet (Intermediate)</td>
<td>2</td>
</tr>
<tr>
<td>PE 191</td>
<td>History of Dance</td>
<td>3</td>
</tr>
<tr>
<td>TH 140</td>
<td>Theatre Dance - Beginning Jazz</td>
<td>2</td>
</tr>
<tr>
<td>TH 141</td>
<td>Theatre Dance - Intermediate Jazz</td>
<td>2</td>
</tr>
</tbody>
</table>

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 181</td>
<td>Introduction to Dance Cultures of the World</td>
<td>2</td>
</tr>
<tr>
<td>PE 184</td>
<td>Choreography Improvisation</td>
<td>3</td>
</tr>
<tr>
<td>PE 190</td>
<td>Rhythmic Analysis/Dance Notation</td>
<td>3</td>
</tr>
<tr>
<td>PE 191</td>
<td>History of Dance (lecture)</td>
<td>3</td>
</tr>
</tbody>
</table>

California State University Fullerton:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 181</td>
<td>Introduction to Dance Cultures of the World</td>
<td>2</td>
</tr>
<tr>
<td>PE 193</td>
<td>Introduction to Ballroom Dance</td>
<td>2</td>
</tr>
<tr>
<td>PE 196</td>
<td>Latin Social Dance</td>
<td>2</td>
</tr>
<tr>
<td>TH 142</td>
<td>Theatre Dance Beginning Tap</td>
<td>2</td>
</tr>
<tr>
<td>TH 143</td>
<td>Theatre Dance Intermediate Tap</td>
<td>2</td>
</tr>
</tbody>
</table>

University of California Irvine:

Dance (All emphases)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 191</td>
<td>History of Dance</td>
<td>3</td>
</tr>
<tr>
<td>PE 181</td>
<td>Introduction to Dance Cultures of the World</td>
<td>2</td>
</tr>
<tr>
<td>PE 193</td>
<td>Introduction to Ballroom Dance</td>
<td>2</td>
</tr>
<tr>
<td>PE 196</td>
<td>Latin Social Dance</td>
<td>2</td>
</tr>
<tr>
<td>TH 142</td>
<td>Theatre Dance Beginning Tap</td>
<td>2</td>
</tr>
<tr>
<td>TH 143</td>
<td>Theatre Dance Intermediate Tap</td>
<td>2</td>
</tr>
</tbody>
</table>

Choreography Emphasis or Performance Emphasis

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 184</td>
<td>Choreography Improvisation</td>
<td>3</td>
</tr>
<tr>
<td>PE 190</td>
<td>Dance Notations (lecture)</td>
<td>3</td>
</tr>
<tr>
<td>TH 110</td>
<td>Fundamentals of Acting</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 222</td>
<td>Stage Lighting</td>
<td>3</td>
</tr>
</tbody>
</table>

Students wishing to major or minor in dance must audition for placement prior to starting the program. Applicants should contact the Department of Dance to obtain audition dates and an audition application form. Students desiring more information should contact the department office for referral to one of the faculty advisors. See a Counselor for additional requirements.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all A.A. degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: Completion of an upper division degree program can lead to employment as a teacher at the secondary, community college or university level in both public and private schools; a performer in dance companies, on television or in dance films/choreographer. Students majoring in such areas as Recreation, Theatre, Physical Education, Fine Arts and Elementary Education would also benefit from the courses within this Dance curriculum.

See Cerritos College Graduation Requirements.

DENTAL ASSISTING

Curriculum leading to Certificate of Achievement and eligibility to write both the California State Board Examination as a Registered Dental Assistant and the National Certifying Board Examination as a Certified Dental Assistant.

LENGTH AND KIND OF PROGRAM

The program is three semesters in length (Fall, Spring, and Summer Session-6 wks). However, students may enter in the Spring Semester by taking selected courses. See the Dental Assisting Counselor.

General education and Dental Assisting classes are scheduled on the College campus and correlated clinical experiences in patient care are obtained at selected dental schools and private dental offices.

Employment in this field requires applicants to have good vision, hearing, and the ability to communicate orally. In addition, applicants must have the ability to comprehend and interpret written information. Applicants must have the dexterity to use small dental instruments to provide dental health care.

ADMISSION REQUIREMENTS

1. Academic Requirements
   a. High school graduate or satisfactory scores on the General Education Development Examination (given at most Adult Education Centers).
   b. Submit transcripts indicating a 2.0 Grade Point Average in all High School and College courses or consent of the Dental Assisting Department.
   c. Take college assessment test and achieve a satisfactory score in English or all deficiencies can be cleared while enrolled in the Dental Assisting Program.
2. Health
   a. Applicant must present evidence of physical fitness. Lab and immunizations records must be completed after acceptance into the program. The student is responsible for all costs incurred.

EXPENSES
   Enrollment fee, project fees, uniforms and books will cost approximately $1200. Students are responsible for their own living accommodations, including uniform laundry and transportation to extended campuses. In the first semester of the program, immunization for Hepatitis B and other infectious diseases is required. Immunization expenses are the student’s responsibility.

ATTENDANCE, SCHOLARSHIP, PROMOTION
   Attendance: All students will be expected to observe the attendance requirements as set by the Dental Assisting Department at Cerritos College.
   Scholarship and Promotion: In order to remain enrolled in the Program, the student must maintain “C” or better in both theory and clinical courses.

ACCEPTANCE OF STUDENTS AT ADVANCED STANDING
   Requests for acceptance into the Program at an advanced level will be evaluated on an individual basis after the applicant has met all College requirements.

PROCEDURE FOR APPLICATION (To be completed in order as listed)
1. Complete application for admission to Cerritos College.
   a. Request two copies of your high school and/or college transcripts. Send one copy to the Health Occupations Division Office and one copy to the Admissions Office.
   b. Call for an application to the Dental Assisting Program, (562) 860-2451, extension 2550.
2. Return completed application to the Health Occupations Division Office and one copy to the Admissions Office.
3. As soon as requested materials are received, the student will be notified in writing regarding eligibility to enroll in the dental assisting program.

CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA 51 Applied Dental Science I</td>
<td>4</td>
</tr>
<tr>
<td>DA 52 Dental Radiography I</td>
<td>2</td>
</tr>
<tr>
<td>DA 53 Introduction to Chairside Assisting</td>
<td>3</td>
</tr>
<tr>
<td>DA 54 Introduction to Operatory Procedures</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DA 61 Applied Dental Science II</td>
<td>3</td>
</tr>
<tr>
<td>DA 62 Dental Radiography II</td>
<td>2</td>
</tr>
<tr>
<td>DA 63 Advanced Chairside Assisting</td>
<td>4</td>
</tr>
<tr>
<td>DA 64 Dental Office Management</td>
<td>2</td>
</tr>
<tr>
<td>DA 65 Clinical I Dental Schools</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUMMER SESSION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DA 75 Clinical II Cooperative Office Training</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL CERTIFICATE REQUIREMENTS</td>
<td>32</td>
</tr>
</tbody>
</table>

To earn a Certificate of Achievement, a student must (a) verify typing proficiency by taking a college typing or computer course with a “C” or better grade or receive a “B” or better in a high school typing or computer course, (b) achieve a satisfactory score in English on the College Placement Test or clear deficiencies, and (c) submit evidence of a current Basic Life Support CPR Certificate to the Dental Assisting counselor.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
   Meet all the requirements as listed for a Certificate of Achievement in Dental Assisting. For an A.A. Degree, a student must also take electives and General Education to achieve a minimum of 60 units. Recommended electives for students interested in Dental Hygiene Program: CHEM 100 MICRO 200 A&P 200, 201, HO 152

DENTAL HYGIENE
   A registered dental hygienist is a preventive oral health professional licensed in dental hygiene who provides educational, clinical and therapeutic services supporting total health through the promotion of optimal oral health.
   The Dental Hygiene Program is a two-year degree program and includes one summer session. Upon completion of the program, graduating students will receive an Associate in Arts Degree in Dental Hygiene and will qualify to take the National and State Board Dental Hygiene Examinations. Successful passage of the examinations qualifies the graduate to practice dental hygiene in the State of California.
   A career in dental hygiene offers multiple opportunities in a variety of settings. A registered dental hygienist may work in such practice settings as: private dental offices and dental clinics; federal, state and local health departments or associated institutions; hospitals and nursing homes; school districts or departments of education; educational programs for dental, dental hygiene and dental assisting students; private business/industry; correctional facilities; private and public centers for pediatric, geriatric and other individuals/groups with special needs; or health maintenance organizations.
   Applicants desiring employment in this field are required to have good vision and the ability to communicate orally. In addition, they must have the capacity to comprehend, analyze, evaluate and record in patients’ charts, and have the dexterity to use small dental instruments to provide dental hygiene care.

DENTAL HYGIENE PROGRAM REQUIREMENTS

I. Prerequisites
   A. CHEM 100, A&P 200, A&P 201, (or A&P 150 and A&P 151), HO 152 and MICRO 200 or equivalent with a grade of “C” or higher.
   B. The acceptance of college work previously completed is at the discretion of Cerritos College and the Dental Hygiene Department. Factors such as elapsed time since the course was completed and grades will be used in determining whether a previously completed course can be accepted towards fulfillment of the graduation requirement. Five years is usually considered maximum elapsed time.
   C. In an attempt to increase eligibility by repeating a prerequisite course to obtain a higher grade, the Dental Hygiene Department will allow any prerequisite course to be repeated a maximum of ONE time, and will accept the higher of the two grades earned.
   D. A valid adult, child, and infant CPR card including two person CPR is required prior to enrolling in the Dental Hygiene Program and must be kept current. CPR courses approved by the State Board are given through the American Heart Association and the American Red Cross.
II. Required Tests and Information
A. Cerritos College Assessment Tests Battery
Receive satisfactory scores on the Cerritos College Assessment/Placement Tests or achieve clearance by taking the appropriate college courses. A 12th grade reading level is required for admission into the program.
B. Preliminary Transcript Evaluation
It is the student’s responsibility to make an appointment with the Counseling Department at Cerritos College to verify equivalent prerequisites and other courses required in the program. The Preliminary Transcript Evaluation must be filled out and signed by a Cerritos College counselor and then submitted to the Health Occupations Division Office along with your Dental Hygiene Application. To complete this procedure, the student must have a student copy of all transcripts from previously attended colleges and documentation of courses in progress.
C. Application forms
If not presently enrolled in courses at Cerritos College, apply for admission to the college at the Admissions and Records Office in the Administration building or apply online at www.cerritos.edu. You will be assigned a student number which you will need to make an appointment with a dental Hygiene counselor or to attend an application workshop.
D. Work Experience
For every related work experience listed, a Verification of Dental Employment form must be completed and mailed to the Health Occupations Division Office. Additional forms are available upon request in the Health Occupations Division Office or online at www.cerritos.edu (dental hygiene). Letters of recommendation are not considered.

III. Selection Procedures
A. Academic evaluation
1. All required documents, including Dental Hygiene application, preliminary transcript evaluation, verification of dental employment forms, copy of RDA or RDAEF License, ALL official college transcripts, and work-in-progress must be in our possession in the Health Occupations Division Office, by April 1 (of the year of application).
2. Points will be earned for the following criteria:
   a. Grade Point Average in prerequisites
   b. Number of units completed up to 60 semester units
   c. Overall Grade Point Average for all college courses
   d. Additional science courses with a grade of “B” or higher
   e. Related dental work experience
3. Selection will be based upon academic evaluation and data obtained from the application forms. Candidates will be notified of their application status by mail during the month of May.
B. Health Forms
Physical examinations, immunization, TB testing and background checks are required prior to patient care and taking the licensure examinations. Health and immunization forms will be issued to those applicants who are accepted in the program. Dental health professionals may be exposed to contagious diseases therefore strict compliance with CDC and OSHA standards are maintained. Policies on blood borne and infectious diseases are available upon request from the Dental Hygiene Department or on the Dental Hygiene website.

IV. Expenses
A. See Cerritos College catalog for enrollment and out-of-state resident fees.
B. The student may expect to spend approximately $10,000 for books and instruments, equipment, uniforms, immunizations, and miscellaneous fees. Students are strongly encouraged to join the Student American Dental Hygienists’ Association (SADHA) ($45.00 annually). Fees are subject to change.

V. Scholarship, Attendance, Promotion, Graduation
A. Attendance: All students are required to observe the attendance requirements of the college. Due to the nature of the Dental Hygiene program it is expected that student will attend all classes.
B. Scholarship and Promotion: Students are required to maintain a grade of “C” or higher in each dental hygiene and dental education course in order to progress in the program. Courses are designed to prepare the student to successfully complete program competencies. Grade requirements of the college are to be met for all other courses.
C. Graduation: Petition for graduation will be permitted if the student meets both the college and the Dental Hygiene Program requirements for graduation. Upon completion of the program the graduate will be qualified to take the Dental Hygiene National Board and the California State Board Examinations.

VI. Criminal Background Checks
A. Clinical placements are a mandatory component of the curriculum and may require clearance of a criminal background check. Students who do not clear agency requirements are not eligible for clinical placement and will, consequently, be ineligible to continue in the program. If there is any concern regarding clearance of a criminal background check, please contact the Health Occupations Division for additional information.
B. Applicants for examination of licensure in the state of California must be fingerprinted and report information related to illegal use of controlled substances, infectious or contagious diseases and any convictions or pleas of nolo contendere even if charges are dismissed. In addition, the application requires specific information related to convictions, misdemeanor or felony, associated with state or federal action. If there is any concern that may prevent licensure after graduation, direct inquiries to the State Board of Dental Examiners, Committee on Auxiliaries, 1428 Howe Avenue, Sacramento, CA 95825, prior to applying to the program.

DENTAL HYGIENE
ASSOCIATE IN ARTS DEGREE

Please note, the Dental Hygiene program requires the student to take as many as seven courses during any one semester. Consequently, commitment to a rigorous study schedule is imperative.

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST YEAR</strong></td>
<td></td>
</tr>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>DH 110</td>
<td>2</td>
</tr>
<tr>
<td>DH 111</td>
<td>2</td>
</tr>
<tr>
<td>DH 112</td>
<td>2</td>
</tr>
<tr>
<td>DH 114</td>
<td>2</td>
</tr>
<tr>
<td>DH 115C</td>
<td>2</td>
</tr>
<tr>
<td>DH 116</td>
<td>2</td>
</tr>
<tr>
<td>DH 119</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>14</td>
</tr>
</tbody>
</table>
Second Semester
DH 120 Preventive Dentistry 2
DH 125 Dental Hygiene Clinical Sciences II 2
DH 125C Clinical Dental Hygiene II 3
DH 126 General and Oral Pathology 2
DH 127 Pharmacology 2
DH 128 Management of Pain 2
DH 129 Applied Periodontics 2

TOTAL 15

SUMMER SESSION
DH 150C Clinical Dental Hygiene IIA 1

SECOND YEAR
First Semester
DH 232L Dental Materials Laboratory 1
DH 234 Dental Care for the Special Patient 2
DH 235 Dental Hygiene Clinical Sciences III 2
DH 235C Clinical Dental Hygiene III 4
DH 238L Community Dental Health Laboratory I 1
DH 239 Dental Health Education & Research I 2

TOTAL 12

Second Semester
DH 244 Ethical Issues in Dental Hygiene 2
DH 245 Dental Hygiene Clinical Sciences IV 2
DH 245C Clinical Dental Hygiene IV 4
DH 248L Community Dental Health Laboratory II 1
DH 249 Dental Health Education and Research II 2

TOTAL 11

TOTAL CERTIFICATE 53

DENTAL HYGIENE
TRANSFER PROGRAM
(The following curriculum does not lead to an Associate in Arts Degree. To earn an AA degree, see Dental Hygiene in the catalog for the major requirements.)

University of Southern California
Minimum entrance requirements:
BIOL 201
A&P 200
CHEM 111
CHEM 112
ENGL 100
ENGL 102 OR ENGL 103
PSYC 101
SOC 101
SPCH 100

Students must complete the USC general education requirements, (categories I,II,III,V) and the writing and diversity requirements in addition to the above courses.

University of California, San Francisco
Applicants for admission to the dental hygiene curriculum must meet the requirements for admission to the University of California as well as the requirements listed below. The University of California requires that English composition, American History, principles of American institutions and 3 years of high school math or college math equivalents satisfying high school deficiencies) be completed in order to receive the degree. These courses must be completed prior to admission at UCSF. Students must complete 90 quarter or 60 semester units of college work at an accredited institution is a minimum requirement for admission to the dental hygiene curriculum. These units must include the following subjects:

English: One year of English composition and literature
Chemistry: Inorganic chemistry with laboratory. A minimum of two quarters or one semester of inorganic chemistry with laboratory,
Biological Sciences: One year of college biology or zoology with laboratory designed for science majors. Vertebrate zoology is strongly recommended.
Psychology: general psychology
Social sciences, humanities or foreign language: An introduction to sociology course and a public speaking/oral communication course must be included in this requirement. Interpersonal communication does not fulfill this requirement.

Additional electives: The total number of units must be at least 90 quarter or 60 semester units. Recommended: physiology and biochemistry in addition to biological sciences noted above.

Entrance requirements may differ at other transfer institutions offering the Dental Hygiene major, for more details consult specific school catalogs.
### ECONOMICS

#### TRANSFER PROGRAM

**LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Units</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University-Long Beach</td>
<td></td>
<td>ECON 201 Principles of Macroeconomics 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECON 202 Principles of Microeconomics 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUSA 101 Fundamentals of Accounting I 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MATH 116 Calculus for Managerial, Biological &amp; Soc. Sciences 4</td>
</tr>
<tr>
<td>or MATH 170 Analytic Geometry and Calculus I</td>
<td>(4)</td>
<td></td>
</tr>
</tbody>
</table>

The major also requires a minimum of two courses outside Economics (totaling at least 6 units). Students may take any of the following lower-division courses: ANTH 100; GEOG 105; HIST 241, HIST 242; MATH 115, MATH 150, MATH 190, MATH 220; POL 201; PSYC 101; SOC 220, SOC 101.

**BUSINESS ECONOMICS-B.A.**

Same requirements as Economics except that the minimum of two courses outside Economics is not required.

### MATHEMATICAL ECONOMICS AND ECONOMIC THEORY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>3</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 202</td>
<td>3</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>MATH 170</td>
<td>4</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>MATH 190</td>
<td>4</td>
<td>Analytic Geometry and Calculus II</td>
</tr>
<tr>
<td>MATH 220</td>
<td>4</td>
<td>Analytic Geometry and Calculus III</td>
</tr>
</tbody>
</table>

**California State University-Fullerton**

Student must earn a grade of at least “C” in each course listed below.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>3</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 202</td>
<td>3</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>BUSA 101</td>
<td>4</td>
<td>Fundamentals of Accounting I</td>
</tr>
<tr>
<td>and BUSA 133</td>
<td></td>
<td>Spreadsheet Accounting I</td>
</tr>
<tr>
<td>MATH 116</td>
<td>4</td>
<td>Calculus for Managerial, Biological &amp; Soc. Sciences</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>(4)</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>MATH 190</td>
<td>4</td>
<td>Analytic Geometry and Calculus II</td>
</tr>
<tr>
<td>or BUSA 102</td>
<td>(4)</td>
<td>Fundamentals of Accounting II</td>
</tr>
<tr>
<td>and BUSA 133</td>
<td></td>
<td>Spreadsheet Accounting I</td>
</tr>
<tr>
<td>CIS 101</td>
<td>3</td>
<td>Introduction to Computer Information Systems</td>
</tr>
</tbody>
</table>

There is also a CSUF lower-division business writing course required which is not offered at Cerritos College.

**California State University-Dominguez Hills**

Common core lower-division required courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>3</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 202</td>
<td>3</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>MATH 112</td>
<td>4</td>
<td>Elementary Statistics</td>
</tr>
</tbody>
</table>

Additional courses required for concentrations.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 101</td>
<td>4</td>
<td>Fundamentals of Accounting I</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>(4)</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 101</td>
<td>3</td>
<td>Introduction to Computer Information Systems</td>
</tr>
<tr>
<td>or CIS 171</td>
<td></td>
<td>Visual Basic Programming</td>
</tr>
</tbody>
</table>

### California State University-Los Angeles

Core requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>3</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 202</td>
<td>3</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>MATH 112</td>
<td>4</td>
<td>Elementary Statistics</td>
</tr>
</tbody>
</table>

**Additional courses required for options.**

**Option 1: Applied Economics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 101</td>
<td>4</td>
<td>Fundamentals of Accounting I</td>
</tr>
<tr>
<td>and BUSA 102</td>
<td></td>
<td>Fundamentals of Accounting II</td>
</tr>
<tr>
<td>CIS 101</td>
<td>3</td>
<td>Introduction to Computer Information Systems</td>
</tr>
<tr>
<td>MATH 170</td>
<td>4</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>or MATH 116</td>
<td>(4)</td>
<td>Calculus for Managerial, Biological &amp; Soc Sciences</td>
</tr>
</tbody>
</table>

**Option 2: Social and Behavioral Sciences**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 101</td>
<td>4</td>
<td>Fundamentals of Accounting I</td>
</tr>
<tr>
<td>and BUSA 102</td>
<td></td>
<td>Fundamentals of Accounting II</td>
</tr>
<tr>
<td>MATH 116</td>
<td>4</td>
<td>Calculus for Managerial, Biological &amp; Soc Sciences</td>
</tr>
</tbody>
</table>

**Additional courses required.**

Students are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

**California Polytechnic University, Pomona**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>3</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 202</td>
<td>3</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>BUSA 101</td>
<td>4</td>
<td>Fundamentals of Accounting I</td>
</tr>
<tr>
<td>BUSA 102</td>
<td>4</td>
<td>Fundamentals of Accounting II</td>
</tr>
<tr>
<td>ENGL 241</td>
<td></td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>or ENGL 103</td>
<td></td>
<td>Critical and Argumentative Writing</td>
</tr>
<tr>
<td>ENGL 155</td>
<td>3</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>MATH 150</td>
<td>4</td>
<td>Precalculus Mathematics</td>
</tr>
</tbody>
</table>

**Additional requirements for students selecting concentration of Track B:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 170</td>
<td>4</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>and MATH 190</td>
<td></td>
<td>Analytic Geometry and Calculus II</td>
</tr>
</tbody>
</table>

**University of California, Los Angeles**

Listed below are the lower division preparation courses for the major. **THIS MAJOR IS HIGHLY SELECTIVE.** All preparatory courses should be completed by the spring term just prior to transfer. All courses must be taken for a letter grade. The calculus course requirements should be met as early as possible. **After transfer to UCLA, students may not change their major to Economics if they were originally admitted to a major outside the Department of Economics.** For more information regarding this major and UCLA’s transfer selection process, visit, [www.econ.ucla.edu](http://www.econ.ucla.edu) and [www.admissions.ucla.edu](http://www.admissions.ucla.edu).

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>3</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 202</td>
<td>3</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>MATH 170</td>
<td>4</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>MATH 190</td>
<td>4</td>
<td>Analytic Geometry and Calculus II</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>3</td>
<td>Freshman Composition and Literature</td>
</tr>
<tr>
<td>or ENGL 103</td>
<td></td>
<td>Critical and Argumentative Writing</td>
</tr>
<tr>
<td>or PHIL 202</td>
<td></td>
<td>Critical Thinking and Argumentative Writing</td>
</tr>
<tr>
<td>or PSYC 103</td>
<td></td>
<td>Critical Thinking in Psychology</td>
</tr>
<tr>
<td>or SPCH 235</td>
<td></td>
<td>Fundamentals of Argumentation and Persuasion</td>
</tr>
</tbody>
</table>
**Business Economics- B.A.**

**THIS MAJOR IS HIGHLY SELECTIVE.** All preparatory courses should be completed by the spring term just prior to transfer. All courses must be taken for a letter grade. The calculus course requirements should be met as early as possible. **After transfer to UCLA, students may not change their major to Business Economics if they were originally admitted to a major outside the Department of Economics.**

Note: The Business Economics major does not replicate the traditional undergraduate business school curriculum. For more information regarding this major and UCLA’s transfer selection process, visit [www.admissions.ucla.edu](http://www.admissions.ucla.edu) and [www.econ.ucla.edu](http://www.econ.ucla.edu).

ECON 201 Principles of Macroeconomics 3  
ECON 202 Principles of Microeconomics 3  
MATH 170 Analytic Geometry and Calculus I 4  
MATH 190 Analytic Geometry and Calculus II 4  
ENGL 102 Freshman Composition and Literature 3  
-or ENGL 103 Critical and Argumentative Writing (3)  
-or PHIL 202 Critical Thinking and Argumentative Writing (3)  
-or PSYC 103 Critical Thinking in Psychology (3)  
-or SPCH 235 Fundamentals of Argumentation and Persuasion (3)

**Economics/International Area Studies-B.A.**

**THIS MAJOR IS HIGHLY SELECTIVE.** Except for the courses in foreign language, ALL preparatory courses should be completed by the spring term just prior to transfer. All courses must be taken for a letter grade. The calculus course requirements should be met as early as possible. **After transfer to UCLA, students may not change their major to Economics/International Area Studies if they were originally admitted to a major outside the Department of Economics.** For more information regarding this major and UCLA’s transfer selection process visit [www.admissions.ucla.edu](http://www.admissions.ucla.edu) and [www.econ.ucla.edu](http://www.econ.ucla.edu).

ECON 201 Principles of Macroeconomics 3  
ECON 202 Principles of Microeconomics 3  
MATH 170 Analytic Geometry and Calculus I 4  
MATH 190 Analytic Geometry and Calculus II 4  
FREN 202 Intermediate French, Advanced Level I 4  
or GERM 202 Intermediate German (4)  
or JAPN 202 Intermediate Japanese (4)  
or SPAN 202 Intermediate Spanish (4)  
*The 6th quarter of the same foreign language will have to be completed at UCLA.*

**University of California - Riverside**

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete ECON 201 & 202 and MATH 80 (or equivalent) plus related coursework to be selected in consultation with a counselor to meet the 18 unit minimum and the AA degree general education requirements for a total of at least 60 units.

**CAREER OPPORTUNITIES:** Economics find employment in business, industry and government as price and market analysts, planning consultants and related occupations.

See Cerritos College Graduation Requirements.

**EDUCATIONAL TECHNOLOGY PROGRAM**

**EDUCATIONAL TECHNOLOGY CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS**

You must complete 11 units in the following area:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDT 100</td>
<td>Integration of the Internet to the Curriculum</td>
<td>2</td>
</tr>
<tr>
<td>EDT 103</td>
<td>Spreadsheets for Educators</td>
<td>2</td>
</tr>
<tr>
<td>EDT 104</td>
<td>Word Processing for Educators</td>
<td>2</td>
</tr>
<tr>
<td>EDT 105</td>
<td>PowerPoint for Educators</td>
<td>2</td>
</tr>
<tr>
<td>EDT 111</td>
<td>Web Design Using FrontPage</td>
<td>1</td>
</tr>
<tr>
<td>EDT 125</td>
<td>Fundamentals of Teaching Online Courses</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

**Additional Requirements—You must complete 7 units in the following area:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDT 19</td>
<td>Fundamentals of Teleconferencing</td>
<td>1</td>
</tr>
<tr>
<td>EDT 43</td>
<td>Ed Tech Occupational Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>EDT 50</td>
<td>Preparation for Online Learning</td>
<td>1</td>
</tr>
<tr>
<td>EDT 51</td>
<td>Email for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 52</td>
<td>Windows for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 53</td>
<td>Macintosh for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 57</td>
<td>Apple/Claris Works for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 64</td>
<td>HyperStudio Basics</td>
<td>1</td>
</tr>
<tr>
<td>EDT 65</td>
<td>Advanced HyperStudio</td>
<td>1</td>
</tr>
<tr>
<td>EDT 67</td>
<td>Inspiration Presentations</td>
<td>1</td>
</tr>
<tr>
<td>EDT 68</td>
<td>Using KidPix</td>
<td>1</td>
</tr>
<tr>
<td>EDT 81</td>
<td>Videos for School Use</td>
<td>2</td>
</tr>
<tr>
<td>EDT 101</td>
<td>Creating Curriculum Projects Using the Internet</td>
<td>1</td>
</tr>
<tr>
<td>EDT 106</td>
<td>Access for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 107</td>
<td>Desktop Publishing for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 108</td>
<td>Photoshop Elements for Educators</td>
<td>2</td>
</tr>
<tr>
<td>EDT 109</td>
<td>Developing Campus Based Portfolios</td>
<td>1</td>
</tr>
<tr>
<td>EDT 112</td>
<td>Virtual Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EDT 115</td>
<td>Technology Integration in Education</td>
<td>1</td>
</tr>
<tr>
<td>EDT 119</td>
<td>Hardware and Software Considerations for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 120</td>
<td>Exploring Assistive Technology in Education</td>
<td>2</td>
</tr>
<tr>
<td>EDT 121</td>
<td>Using Handheld Computers in Education</td>
<td>2</td>
</tr>
<tr>
<td>EDT 122</td>
<td>Fundraising/Grand Writing for Educators</td>
<td>2</td>
</tr>
<tr>
<td>ART 196</td>
<td>Introduction to Designing Web Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Computer Literacy</td>
<td>.5</td>
</tr>
</tbody>
</table>

Two additional introductory social science courses in disciplines other than economics is another requirement. An approved list of courses can be obtained from ASSIST. Please see a counselor, if necessary, for help.
### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete all the major requirements for the Certificate of Achievement and all A.A. degree general education requirements for a total of at least 60 units.

Although some of these courses are transferable, this certificate/A.A. Degree is nontransferable.

Please see counselor or the respective department for additional alternatives.

### TELECONFERENCING PRACTITIONER CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDT 19 Fundamentals of Teleconferencing</td>
<td>1</td>
</tr>
<tr>
<td>EDT 20 Teleconferencing for Small Groups</td>
<td>2</td>
</tr>
<tr>
<td>EDT 21 Teleconference Telemeatic</td>
<td>1</td>
</tr>
<tr>
<td>EDT 22 Teleconference Event Review and Evaluation</td>
<td>1</td>
</tr>
<tr>
<td>EDT 23 Teleconference Production Studio</td>
<td>3</td>
</tr>
<tr>
<td>EDT 24 Teleconference Portfolio Workshop</td>
<td>3</td>
</tr>
<tr>
<td>EDT 52 Windows for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 53 Macintosh for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 119 Hardware and Software Considerations for Educators</td>
<td>1</td>
</tr>
<tr>
<td>ART 196 Introduction to Designing Web Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 50 Basic Computer Literacy</td>
<td>.5</td>
</tr>
<tr>
<td>EDT 43 EdTech Occupational Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>EDT 50 Preparation for Online Learning</td>
<td>1</td>
</tr>
<tr>
<td>EDT 51 Email for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 57 Apple/Claris Works for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 64 Hyperstudio Basics</td>
<td>1</td>
</tr>
<tr>
<td>EDT 65 Advanced Hyperstudio</td>
<td>1</td>
</tr>
<tr>
<td>EDT 67 Inspiration Presentations</td>
<td>1</td>
</tr>
<tr>
<td>EDT 68 Using KidPix</td>
<td>1</td>
</tr>
<tr>
<td>EDT 81 Videos for School Use</td>
<td>2</td>
</tr>
<tr>
<td>EDT 101 Creating Curriculum Projects Using the Internet</td>
<td>1</td>
</tr>
<tr>
<td>EDT 106 Access for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 112 Virtual Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EDT 115 Technology Integration in Education</td>
<td>1</td>
</tr>
<tr>
<td>EDT 120 Exploring Assistive Technology in Education</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 112 Intermediate Digital Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENT:** 18

To be awarded a Certificate of Achievement by the college, a student must complete all the major requirements and 4 additional requirement section to total a minimum of 18 units.

### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the requirements for the Certificate of Achievement and all A.A. degree general education requirements for a total of at least 60 units.

Please see counselor or the respective department for additional alternatives.
ELECTRONICS TECHNOLOGY
ASSOCIATE IN ARTS DEGREE

REQUIRED COURSES

ELECTRONICS TECHNOLOGY - BASIC CORE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 50</td>
<td>Electronic Tests and Measurements</td>
<td>1.5</td>
</tr>
<tr>
<td>EL 60</td>
<td>Computer Aided Circuit Analysis</td>
<td>1.5</td>
</tr>
<tr>
<td>EL 110</td>
<td>Principles of DC Electronics</td>
<td>4</td>
</tr>
<tr>
<td>EL 110L</td>
<td>DC Electronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EL 120</td>
<td>Principles of AC Electronics</td>
<td>4</td>
</tr>
<tr>
<td>EL 120L</td>
<td>AC Electronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EL 134</td>
<td>Digital Circuits and Computer</td>
<td>3</td>
</tr>
<tr>
<td>EL 134L</td>
<td>Digital Circuits and Computer Logic Lab</td>
<td>1</td>
</tr>
<tr>
<td>EL 200</td>
<td>Semiconductor Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EL 200L</td>
<td>Semiconductor Electronics</td>
<td>1</td>
</tr>
<tr>
<td>TM 50</td>
<td>Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 140</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS 32

ADDITIONAL REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 210</td>
<td>Electronics Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EL 210L</td>
<td>Electronics Systems Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EL 244</td>
<td>Introduction to Microcomputers</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS 37

ASSOCIATE IN ARTS DEGREE REQUIREMENTS: Complete 60 units to include (1) the Electronic Technology Option Basic Core requirements (24 units), (2) the additional required courses (8 units), (3) The Associate in Arts Degree general education requirements, and (4) electives as needed to fulfill the graduation requirements.

RECOMMENDED ELECTIVES: ENGL 155, CIS 56, CIS 70A, CIS 101, CIS 102.

CAREER OPPORTUNITIES: Opportunities for electronic technicians include the aerospace, automotive, transportation, computer, instrumentation, telecommunication, television broadcasting, entertainment, motion picture, process control, manufacturing and health care industries and government agencies.

Related Transfer Program: Industrial Technology – Electronics

See Cerritos College Graduation Requirements.

ELECTRONICS TECHNOLOGY
CERTIFICATE OF ACHIEVEMENT

REQUIRED COURSES

ELECTRONICS PROGRAM BASIC CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 50</td>
<td>Electronic Tests and Measurements</td>
<td>1.5</td>
</tr>
<tr>
<td>EL 60</td>
<td>Computer Aided Circuit Analysis</td>
<td>1.5</td>
</tr>
<tr>
<td>EL 110</td>
<td>Principles of DC Electronics</td>
<td>4</td>
</tr>
<tr>
<td>EL 110L</td>
<td>DC Electronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EL 120</td>
<td>Principles of AC Electronics</td>
<td>4</td>
</tr>
<tr>
<td>EL 120L</td>
<td>AC Electronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>EL 134</td>
<td>Digital Circuits and Computer</td>
<td>3</td>
</tr>
<tr>
<td>EL 134L</td>
<td>Digital Circuits and Computer Logic Lab</td>
<td>1</td>
</tr>
<tr>
<td>EL 200</td>
<td>Semiconductor Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EL 200L</td>
<td>Semiconductor Electronics</td>
<td>1</td>
</tr>
<tr>
<td>TM 50</td>
<td>Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 140</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS 24

ASSOCIATE IN ARTS DEGREE REQUIREMENTS: Complete 60 units to include (1) the Computer Servicing Technology Option (37 units), (2) The Associate in Arts Degree general education requirements, and (3) electives as needed to fulfill the graduation requirements.

RECOMMENDED ELECTIVES: ENGL 155, CIS 56, CIS 70A, CIS 101, CIS 102.

CAREER OPPORTUNITIES: Opportunities for electronic technicians include the aerospace, automotive, transportation, computer, instrumentation, telecommunication, television broadcasting, entertainment, motion picture, process control, manufacturing and health care industries and government agencies.

Related Transfer Program: Industrial Technology – Electronics

See Cerritos College Graduation Requirements.

ENGINEERING
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION

FOR MOST COLLEGES OF ENGINEERING (CORE)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

Certificates of Achievement in Electronics are available under four options. All options require completion of the Basic Electronics Core Courses. With Department approval, selection of the option courses may be tailored to student’s occupational objectives. Each option may be applied to the Associate in Arts Degree.

INDUSTRIAL ELECTRONICS TECHNOLOGY OPTION

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 56</td>
<td>Programmable Logic Controllers</td>
<td>3.5</td>
</tr>
<tr>
<td>EL 66</td>
<td>Fundamentals of Electricity</td>
<td>3</td>
</tr>
<tr>
<td>EL 76</td>
<td>Industrial Electronic Control</td>
<td>3.5</td>
</tr>
<tr>
<td>EL 86</td>
<td>Electric Motor Control</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS 37

ASSOCIATE IN ARTS DEGREE REQUIREMENTS: Complete 60 units to include (1) the Industrial Electronics Technology Option (37 units), (2) The Associate in Arts Degree general education requirements, and (3) electives as needed to fulfill the graduation requirements.

RECOMMENDED ELECTIVES: ENGL 155, CIS 56, CIS 70A, CIS 101, CIS 102.

CAREER OPPORTUNITIES: Opportunities for electronic technicians include the aerospace, automotive, transportation, computer, instrumentation, telecommunication, television broadcasting, entertainment, motion picture, process control, manufacturing and health care industries and government agencies.

Related Transfer Program: Industrial Technology – Electronics

See Cerritos College Graduation Requirements.

COMPUTER SERVICING TECHNOLOGY OPTION

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 54</td>
<td>Microcomputer Repair Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>EL 244</td>
<td>Introduction to Microcomputers</td>
<td>4</td>
</tr>
</tbody>
</table>

Choose from the following for a total of (6) units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 56</td>
<td>Microcomputer Disk Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 70A</td>
<td>Networking Fundamentals</td>
<td>2.5</td>
</tr>
<tr>
<td>EL 53A</td>
<td>Introduction to Microprocessors</td>
<td>3</td>
</tr>
<tr>
<td>EL 53B</td>
<td>Advanced Microprocessors</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS 37(38.5)

ASSOCIATE IN ARTS DEGREE REQUIREMENTS: Complete 60 units to include (1) the Computer Servicing Technology Option (37 units), (2) The Associate in Arts Degree general education requirements, and (3) electives as needed to fulfill the graduation requirements.

RECOMMENDED ELECTIVES: ENGL 155, CIS 56, CIS 70A, CIS 101, CIS 102.

CAREER OPPORTUNITIES: Opportunities for electronic technicians include the aerospace, automotive, transportation, computer, instrumentation, telecommunication, television broadcasting, entertainment, motion picture, process control, manufacturing and health care industries and government agencies.

Related Transfer Program: Industrial Technology – Electronics

See Cerritos College Graduation Requirements.
Schools of engineering have similar basic science requirements but differ widely in the preparation for the various engineering options available. The following science, engineering, technical support, and math courses meet specific requirements for transfer as needed for the several options usually available at the four-year college level.

Contact a Cerritos engineering counselor for the specific requirements of the school and option you have selected in order to optimize preparation for transfer or www.ASSIST.ORG for lower division major requirement for most California public universities.

California State University – Long Beach

(CSULB) Offers nine BS degrees: aerospace, chemical, civil, computer, computer science, electrical, manufacturing, mechanical, and general engineering with options in: industrial management, ocean materials, biomedical and clinical, audio, and theme park.

California State University – Fullerton

(CSUFP) Has a common core of courses for the first two and one-half years. During the last two years the student selects engineering courses appropriate to one of the three options available: Electrical, Civil, and Mechanical.

California State University – Los Angeles

(CSUULA) Offers programs leading to the Bachelor of Science degree in Engineering with options in Civil, Electrical, and Mechanical Engineering.

California State University – Pomona

(CSUP) Engineering school departments: Aerospace, Chemical, Materials, Civil, Electrical and Computer, Industrial, Manufacturing, and Mechanical. This institution combines technical applied courses with the sciences throughout the entire program. Due to the fact that many of technical courses required cannot be duplicated at the community college level, it is wise to plan on attending Cal Poly during the summer quarter following graduation from Cerritos College.

University of California – Los Angeles

(UCLA) Offers Bachelor’s Degree in the following: Aerospace, Chemical, Civil, Computer Science, Computer Science and Engineering, Electrical, Materials, and Mechanical.

University of California – Irvine

(UCI) Offers Bachelor’s Degree in the following: Aerospace, Chemical, Civil, and Computer Engineering, Electrical, Environmental, Material Science and Mechanical.

University of California – Riverside

(UCR) Offers Bachelor’s Degree in the following: Chemical, Computer, Electrical, Environmental, and Mechanical.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) the Engineering core, (2) ENGR 112 or ENGT 131, (3) CIS 177 or 178 or 180 or 280, (4) the Associate in Arts General Education Requirements.

CAREER OPPORTUNITIES: Career opportunities in engineering vary widely depending upon the area of specialization. The Cerritos Career Center provides current and comprehensive career information concerning each engineering discipline. Because engineering is a high unit professional major, the schools of engineering may require special general education classes. Contact a Cerritos engineering counselor for specific information.

ENGINEERING DESIGN TECHNOLOGY PROGRAMS CERTIFICATES OF COMPLETION/ENGINEERING DESIGN TECHNOLOGY

MACHINE DESIGN AND MANUFACTURING

- ENGT 117 Geometrical Dimensioning and Tolerancing 2
- ENGT 153 Machine Drawing and Design with AutoCAD 3
- ENGT 237 Graphical Statics and Strength of Materials 3
- ENGT 256 Introduction to AutoCAD Mechanical Desktop 4
- ENGT 258 Design and Production Technology with AutoCAD 4

16 units

3-D PARAMETRIC MODELING AND PRESENTATIONS

- ENGT 153 Machine Drawing and Design with AutoCAD 3
- ENGT 255 AutoCAD Rendering and Solid Modeling Applications 4
- ENGT 256 Advanced Application of AutoCAD Mechanical Desktop 4

15 units

AUTOCAD APPLICATIONS WITH MAP

- ENGT 131 Fundamentals of Drafting Including AutoCAD 3
- ENGT 138 Fundamentals of Computer Aided Drafting 4
- ENGT 151 Advanced Applications of Computer Aided Drafting and Design Using AutoCAD 4
- ENGT 160 AutoCAD MAP 4

15 units
**AUTOCAD/INVENTOR APPLICATIONS WITH SHEET METAL LAYOUT**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 117</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 133</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 138</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 153</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 256</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**ENGINEERING DESIGN AND PRODUCTION TECHNOLOGY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 133</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 258</td>
<td>4</td>
</tr>
<tr>
<td>MFGT 100</td>
<td>3</td>
</tr>
<tr>
<td>MET 100A</td>
<td>3</td>
</tr>
<tr>
<td>MTT 100</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14.5</strong></td>
</tr>
</tbody>
</table>

**ENGINEERING DESIGN TECHNOLOGY CERTIFICATE OF ACHIEVEMENT**

**Recommended High School Preparation:**
One year Algebra, one year of Mechanical Drafting

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 117</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 133</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 138</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 151</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 153</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 160</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 237</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 255</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 256</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 257</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 259</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Certificate Requirement:</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

**ENGINEERING DESIGN AND PRODUCTION TECHNOLOGY OPTION**

Above courses required plus

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 116</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 131</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 258</td>
<td>4</td>
</tr>
<tr>
<td>MTT 100</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Total Certificate Requirement:</strong></td>
<td><strong>49.5</strong></td>
</tr>
</tbody>
</table>

**ENGINEERING DESIGN TECHNOLOGY ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Meet the above requirements as listed for the Certificate of Achievement in Engineering Design and Production. A student must also complete electives, and A.A. Degree general education requirements to achieve a minimum of 60 units.

**RECOMMENDED ELECTIVES:**
BA 107, BA 117, MATH 60, MFGT 51, MFGT 100, MET 100A, TM 50

**CAREER OPPORTUNITIES:**
Designers, master layout person, systems designers, junior design and tool designer, and CAD/CAM designers.

**RELATED TRANSFER PROGRAM:** Industrial (Engineering) Technology-Manufacturing Option.

See Cerritos College Graduation Requirements.

---

**ENGLISH TRANSFER PROGRAMS**

**COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 100</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 103</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246B</td>
<td>3</td>
</tr>
</tbody>
</table>

**FOREIGN LANGUAGE:**
Students intending to transfer to the University of California should discuss the foreign language requirement with a counselor.

**LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University-Dominguez Hills**
Select one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 232</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 233</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 234</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 235</td>
<td>3</td>
</tr>
</tbody>
</table>

**California State University-Long Beach**

Option in Literature:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 248A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246B</td>
<td>3</td>
</tr>
</tbody>
</table>

**University of California – Berkeley**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 246A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 228</td>
<td>3</td>
</tr>
</tbody>
</table>

**University of California-Irvine**

Complete 202 of Intermediate College Level Foreign Language. Select one from the following: FRENCH, GERMAN, JAPANESE or SPANISH

Complete one series from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 230A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246B</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 232</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 233</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 235</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246A</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246B</td>
<td>3</td>
</tr>
</tbody>
</table>
or ENGL 248A Masterpieces of World Literature (3)
and ENGL 248B Masterpieces of World Literature (3)

University of California-Los Angeles

Complete 202 of Intermediate College Level Foreign Language. Select from the following: FRENCH, GERMAN, JAPANESE or SPANISH or Course 102 of one Foreign Language, AND select two (2) courses from the following:

ENGL 221A Literature in the Bible: Hebrew Scriptures 3
ENGL 221B Literature in the Bible: Christian Scriptures 3
ENGL 225 Mexican Literature in Translation 3

University of California-Riverside

(Complete two courses from the following:)

ENGL 230A Introduction to American Literature 3
ENGL 230B Introduction to American Literature 3
ENGL 246A Survey of English Literature 3
ENGL 246B Survey of English Literature 3

Recommended one course from the following:

ENGL 248A Masterpieces of World Literature 3
ENGL 248B Masterpieces of World Literature 3

Students intending to transfer should consult with a counselor for academic planning to specify university. Please consult with www.assist.org frequently to obtain current information.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) ENGL 100 and ENGL 102 or ENGL 103; (2) 12 additional units in English courses selected from ENGL 221A, 221B, 222, 225, 226, 227, 228, 230A, 230B, 232, 233, 234, 235, 246A, 246B, 248A, 248B, and (3) the Associate in Arts Degree general education requirements.

CAREER OPPORTUNITIES: English graduates are employed in a number of fields that require analytical communication skills: publications, communications, media, entertainment, creative writing, government, and business management. Graduate English majors also find English is excellent preparation for advanced studies as wide-ranging as law, theology, psychology, pre-med and business administration.

CREATIVE WRITING/SCREENWRITING CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS: 

Choose 6 units from the following courses, each repeatable 2 times: 

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 240</td>
<td>Creative Writing</td>
</tr>
<tr>
<td>ENGL 241</td>
<td>Screenwriting</td>
</tr>
<tr>
<td>or TH 241</td>
<td>Screenwriting</td>
</tr>
</tbody>
</table>

Choose (6) units from the following: 

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 227</td>
<td>Readings in Current Literature</td>
</tr>
<tr>
<td>ENGL 228</td>
<td>Shakespeare’s Plays</td>
</tr>
<tr>
<td>ENGL 232</td>
<td>Readings in Poetry</td>
</tr>
<tr>
<td>ENGL 233</td>
<td>Reading in the Novel</td>
</tr>
<tr>
<td>ENGL 234</td>
<td>Reading in Short Fiction</td>
</tr>
<tr>
<td>ENGL 235</td>
<td>Reading in the Drama</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 12

All course work required for the certificate must be completed with a minimum grade of “C.”

FAMILY AND CONSUMER SCIENCE CAREER PATHWAY
(FORMERLY HOME ECONOMICS)

(The following does not lead to an Associate in Arts Degree)

CSU Long Beach offers the Bachelor of Arts degree in Family Consumer Sciences

OPTIONS:
Family Studies
Communication
Consumer Affairs
Fashion Merchandising
Textiles and Clothing

A Bachelor of Science in Dietetics and Food Administration is offered by the Department of Family and Consumer Sciences.

Each option requires specific courses. Students are urged to see a Cerritos College counselor for accurate and complete lower division preparation.

LOWER DIVISION REQUIREMENTS

California State University—Long Beach

Child Development & Family Studies Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 120</td>
<td>Introduction to Human Anatomy and Physiology</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
</tr>
<tr>
<td>or ANTH 100</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>CD 110</td>
<td>Child Development</td>
</tr>
<tr>
<td>HO 152</td>
<td>Normal &amp; Therapeutic Nutrition</td>
</tr>
<tr>
<td>CDIT 151</td>
<td>Infant and Toddler Development</td>
</tr>
<tr>
<td>and CDIT 152</td>
<td>Infant and Toddler Programs</td>
</tr>
</tbody>
</table>

Communication Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 100</td>
<td>Introductory Chemistry</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
</tr>
<tr>
<td>or ANTH 100</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>SPCH 100</td>
<td>Fundamentals of Oral Communication</td>
</tr>
<tr>
<td>or SPCH 120</td>
<td>Fundamental of Interpersonal Communication</td>
</tr>
<tr>
<td>CD 110</td>
<td>Child Development</td>
</tr>
<tr>
<td>HO 152</td>
<td>Normal &amp; Therapeutic Nutrition</td>
</tr>
<tr>
<td>CA 101</td>
<td>Introduction to Food Service, Safety and Sanitation</td>
</tr>
</tbody>
</table>

Consumer Affairs Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 101</td>
<td>Fundamentals of Accounting I</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>or PSYC 210</td>
<td>Elementary Statistics</td>
</tr>
</tbody>
</table>

These must be completed with a “C” or better.
**Fashion Merchandise Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSA 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>(5)</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles</td>
<td>3</td>
</tr>
<tr>
<td>HIST 241</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>or ART 101</td>
<td>Appreciation and History</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 201</td>
<td>Social Problems</td>
<td>(3)</td>
</tr>
<tr>
<td>or ANTH 100</td>
<td>Cultural Anthropology</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 186</td>
<td>Computer Graphics in Art &amp; Design</td>
<td>3</td>
</tr>
</tbody>
</table>

These must be completed with a “C” or better

**Textiles and Clothing Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 100</td>
<td>Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>(5)</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>HIST 241</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>or ART 101</td>
<td>Appreciation and History</td>
<td>(3)</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 201</td>
<td>Social Problems</td>
<td>(3)</td>
</tr>
<tr>
<td>or ANTH 100</td>
<td>Cultural Anthropology</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 186</td>
<td>Computer Graphics in Art &amp; Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Bachelor of Science in Dietetics and Food Administration at CSULB**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 151</td>
<td>Introduction to Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 201</td>
<td>Human Physiology</td>
<td>(5)</td>
</tr>
<tr>
<td>CA 101</td>
<td>Introduction to Food Service, Safety &amp; Sanitation</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>MICRO 200</td>
<td>Principles and Applications of Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introduction Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 101</td>
<td>Social Problems</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 186</td>
<td>Computer Graphics in Art &amp; Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**FORESTRY TRANSFER PROGRAM**

**California State University – Humboldt**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Elementary Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological, and Social Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>(4)</td>
</tr>
</tbody>
</table>

**Forestry Hydrology Option:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101</td>
<td>The Earth Environment</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**University of California – Berkeley**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246A</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 246B</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Earth Environment</td>
<td>4</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete one of the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all A.A. degree general education requirements for a total of at least 60 units.

**CAREER OPPORTUNITIES:** After transfer to a four year college or university and completion of the Bachelor’s Degree Program, graduates qualify for graduate study and for employment with timber companies, utility companies, U.S. Forest Service, National Park Service, Bureau of Land Management, Environment Protection Agency, and the California Division of Forestry.

See Cerritos College Graduation Requirements.

See State University General Education List.

**FRENCH TRANSFER PROGRAM**

**California State University – Fullerton**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 102</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 201</td>
<td>Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 202</td>
<td>Intermediate French</td>
<td>4</td>
</tr>
<tr>
<td>FREN 203</td>
<td>Intermediate French, Advanced Level I</td>
<td>4</td>
</tr>
</tbody>
</table>

**California State University – Los Angeles**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 102</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 201</td>
<td>Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 202</td>
<td>Intermediate French</td>
<td>4</td>
</tr>
<tr>
<td>FREN 281</td>
<td>Beginning Conversational French</td>
<td>3</td>
</tr>
</tbody>
</table>

Students are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

**California State University – Long Beach**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 102</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 281</td>
<td>Beginning Conversational French</td>
<td>3</td>
</tr>
</tbody>
</table>

Students who have completed sufficient high school French may take upper-division courses as soon as lower-division requirements have been met.
Two years of a second foreign language at the college level or equivalent is also required.

Departmental Recommendation: Students specializing in French are recommended to include the following courses in their program of study: HIST 241 and HIST 242.

**University of California – Irvine**
FREN 101 Elementary French 5
and FREN 102 Elementary French 5
FREN 201 Intermediate French 5
and FREN 202 Intermediate French 4

At least one course is required from four different areas (writing, literature, history, and philosophy). An approved list of courses is available from www.assist.org. Please consult a counselor, if necessary, for these additional classes.

**University of California – Riverside**
FREN 101 Elementary French 5
and FREN 102 Elementary French 5
FREN 201 Intermediate French 5
and FREN 202 Intermediate French 4

Note: Students may either take the courses listed above or demonstrate equivalent proficiency (as measured by a placement exam at UCR). Transfer students who have taken a college-level language course cannot take the placement exam and should consult with their advisors. No college-level credit may be duplicated.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**
(1) Meet the above requirements as listed for a state university, (2) complete the A.A. Degree general education requirements, and (3) take electives to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: Employment with the government, international firms, airline hostess, travel agent, librarian, linguistic reporter, teacher interpreter, translator.

See Cerritos College Graduation Requirements.
See State University General Education List.

**GEOGRAPHY**

**TRANSFER PROGRAM**

**COMMON LOWER DIVISION PREPARATION**

**UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 101 Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102 Cultural Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

**ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University – Los Angeles**
GEOG 106 Introduction to Geographic Information Systems 3
ENGL 103* Critical and Argumentative Writing 3

*Students transferring to CSULA should plan to take ENGL 103 as their Critical Thinking requirement. Although it is not a major requirement, it meets the prerequisite for a university graduation requirement.

**University of California – Los Angeles**
MATH 112 Elementary Statistics 4

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**
Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all A.A. degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: Employment in business, regional, urban, and environmental planning, government, foreign service, teaching.

See Cerritos College Graduation Requirements.
See State University General Education List.

**GEOLOGY**

**TRANSFER PROGRAM**

**COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY AND THE UNIVERSITY OF CALIFORNIA**

**UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 101 The Earth Environment</td>
<td>4</td>
</tr>
</tbody>
</table>

**ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University – Dominguez Hills**
GEOL 201 Earth History 4
PHYS 101 General Physics 4
and PHYS 102 General Physics 4
or PHYS 201 Engineering Physics (4)
and PHYS 202 Engineering Physics (4)
and PHYS 203 Engineering Physics (4)
MATH 170 Analytic Geometry and Calculus I 4
and MATH 190 Analytic Geometry and Calculus II 4
or MATH 116 Calculus for Managerial, Biological and Social Sciences (4)
and MATH 112 Elementary Statistics 4

**California State University – Fullerton (Geological Science)**
Biol 120 Introduction to Biological Science 4
or BIOL 200 Principles of Biology (5)
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
or, with consent of CSUF advisor:
Phys 101 and Phys 102
One additional semester course (with approval of CSUF advisor):
BIOL 201 Principles of Biology 5
A&P 120 Introduction to Human Anatomy and Physiology 4
CIS 230 Assembly Programming for Microcomputers 4
MATH 220 Analytical Geometry and Calculus III 4
MATH 240 Calculus and Differential Equations 4
PHYS 203 Engineering Physics 4

California State University – Long Beach
BIOL 120 Introduction to Biological Science 4
GEOL 201 Earth History 4
MATH 170 analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4

*Consult Counselor for additional required courses for
Earth Science option.

California State University – Los Angeles
BIOL 120 Introduction to Biological Science 4
GEOL 201 Earth History 4
MATH 170 analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4

Recommended course for the various emphases:
MATH 220 Analytic Geometry and Calculus III 4

*Consult with a counselor for additional required courses
for the Earth Science option.

California State University Polytechnic – Pomona
GEOL 201 Earth History 4
MATH 112 Elementary Statistics 4
MATH 170 analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
PHYS 203 Engineering Physics 4

University of California – Los Angeles
BIOL 120 Introduction to Biological Science 4
CIS 178 Programming in Fortran 3
or CIS 180 Programming in C/C++ (3)
ESCI 110 Introduction to Earth Science 4
MATH 170 analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
PHYS 203 Engineering Physics 4

University of California – Riverside
BIOL 201 Principles of Biology 5
GEOL 201 Earth History 4
MATH 170 analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4

All courses that are prerequisites to the major must be completed with a “C” or better.
For more Geology options please consult with a counselor.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include (1) a combination of geology and other science courses, in consultation with a counselor, equaling 18 units and (2) the Associate in Arts degree general education requirements.

CAREER OPPORTUNITIES: After transfer to a four-year college or university and completion of the Bachelor’s Degree program, graduates qualify for graduate study and for professional careers in government or industry and teaching.

See Cerritos College Graduation Requirements.
See State University General Education List.

GERMAN TRANSFER PROGRAM

California State University – Fullerton
GERM 101 Elementary German 5
GERM 102 Elementary German 5
GERM 201 Intermediate German 4
GERM 202 Intermediate German 4

California State University – Long Beach
GERM 101 Elementary German 5
GERM 102 Elementary German 5
GERM 201 Intermediate German 4
GERM 202 Intermediate German 4

Students who have completed sufficient high-school German may take upper-division courses at CSULB as soon as lower-division requirements have been met.

University of California – Irvine
GERM 101 Elementary German 5
and GERM 102 Elementary German 5
GERM 201 Intermediate German 4
and GERM 202 Intermediate German 4

At least one course from each of four areas (writing, literature, history, and philosophy is also required. An approved list of courses is available from www.assist.org. Please consult a counselor, if necessary, for these additional classes.

University of California – Riverside
GERM 101 Elementary German 5
and GERM 102 Elementary German 5
GERM 201 Intermediate German 4
and GERM 202 Intermediate German 4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
(1) Meet the above requirements as listed for a state university, (2) complete the A.A. Degree general education requirements, and (3) take electives to achieve the minimum of 60 units.

CAREER OPPORTUNITIES: Employment with U.S. or international agencies or with international business firms, airline hostess, travel agency personnel, librarian, linguistic reporter, teacher, interpreter, translator.

See Cerritos College Graduation Requirements.
See State University General Education List.
HISTORY
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY

AND UNIVERSITY OF CALIFORNIA

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 102</td>
<td>Political &amp; Social History of the United States: 1500's to 1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST 103</td>
<td>Political &amp; Social History of the United States: 1877 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 245</td>
<td>World Civilization from Antiquity to 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 246</td>
<td>World Civilization from 1500 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

California State University – Fullerton

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 102</td>
<td>Political and Social History of the United States: 1500’s to 1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST 103</td>
<td>Political and Social History of the United States: 1877 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

California State University – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 103</td>
<td>Critical and Argumentative Writing</td>
<td>3</td>
</tr>
<tr>
<td>HIST 102</td>
<td>Political and Social History of the United States: 1500’s to 1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST 103</td>
<td>Political and Social History of the United States: 1877 to Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 245</td>
<td>World Civilization from Antiquity to 1500</td>
<td>3</td>
</tr>
</tbody>
</table>

California State University – Long Beach

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 102</td>
<td>Political and Social History of the United States: 1500’s to 1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST 103</td>
<td>Political and Social History of the United States: 1877 to Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 241</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 242</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 245</td>
<td>World Civilization from Antiquity to 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 246</td>
<td>World Civilization from 1500 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

University of California – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 241</td>
<td>World Civilization from Antiquity to 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 242</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 245</td>
<td>World Civilization from 1500 to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

Two (2) courses from

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101</td>
<td>American History and Constitution</td>
<td>3</td>
</tr>
<tr>
<td>HIST 110</td>
<td>African-American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 120</td>
<td>History of California</td>
<td>3</td>
</tr>
<tr>
<td>HIST 102</td>
<td>Political and Social History of the United States: 1500’s to 1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST 103</td>
<td>Political and Social History of the United States: 1877 to Present</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 210</td>
<td>History of the United States in the Post World War II Era</td>
<td>3</td>
</tr>
<tr>
<td>HIST 220</td>
<td>History of the Americas</td>
<td>3</td>
</tr>
<tr>
<td>HIST 221</td>
<td>History of the Americas</td>
<td>3</td>
</tr>
<tr>
<td>HIST 230</td>
<td>History of Mexico</td>
<td>3</td>
</tr>
<tr>
<td>HIST 235</td>
<td>History of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 250</td>
<td>History of England, Great Britain and the Commonwealth</td>
<td>3</td>
</tr>
<tr>
<td>HIST 255</td>
<td>History of Russia and the Soviet Union</td>
<td>3</td>
</tr>
<tr>
<td>HIST 260</td>
<td>Survey of the History of Asia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 265</td>
<td>Selected Problems in Contemporary Asian History</td>
<td>3</td>
</tr>
</tbody>
</table>

University of California – Riverside

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 245</td>
<td>World Civilization from Antiquity to 1500</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 242</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
</tbody>
</table>

One additional history course. HIST 201 or HIST 202 is recommended for students who choose the U.S. as their area of concentration.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: Teaching, law, government, and other public services.

See Cerritos College Graduation Requirements.
See State University General Education List.

INDUSTRIAL ARTS EDUCATION
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION

California State University - Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Automotive Maintenance and Operation</td>
<td>4</td>
</tr>
<tr>
<td>EL 110</td>
<td>Principles of DC Electronics</td>
<td>3</td>
</tr>
<tr>
<td>EL 110L</td>
<td>DC Electronics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ENGT 131</td>
<td>Fundamentals of Drafting including AutoCad</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 257</td>
<td>Autodesk Inventor</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 258</td>
<td>Design and Production Technology with AutoCad</td>
<td>4</td>
</tr>
<tr>
<td>MTT 100</td>
<td>Machine Tool Introduction</td>
<td>2.5</td>
</tr>
<tr>
<td>or WELD 100</td>
<td>Welding Fundamentals</td>
<td>(2)</td>
</tr>
</tbody>
</table>
PHOT 100  Introductory Photography  3
WMT 101  Introduction to Woodworking  2

California State University-Los Angeles Requirement:
ENG 103  Critical and Argumentative Writing  3

State Universities that offer majors in Industrial Arts, Technology, and Vocational Education are California State University - Long Beach, Los Angeles, Chico, Fresno, Humboldt, San Diego, San Francisco, San Jose, and San Luis Obispo.

Students wishing to teach in Vocational Education at the Community College, Adult School, ROP, and ROC should consult a counselor for further information.

CSULA offers a B.S. in Industrial Technology with a choice of two options: Aviation Management or Production Technology. See counseling for more information.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include, (1) Select 18 units from the common lower division preparation, (2) the Associate in Arts Degree requirements. CAREER OPPORTUNITIES: After transfer, completion of the Bachelor's Degree Program and receiving a Teaching Credential, graduates are prepared for teaching positions in Industrial Education through High School.

See Cerritos College Graduation Requirements.
See State University General Education List.

INDUSTRIAL TECHNOLOGY—
CONSTRUCTION OPTION
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY  UNITS
(ENGINEERING TECHNOLOGY)
ARCH 111  Architectural Drafting  3
ENGT 131  Fundamentals of Drafting Including AutoCAD  3
ECON 201  Principles of Macroeconomics  3
MATH 150  Pre-Calculus Mathematics  4
PHIL 106  Introduction to Logic  3
PHYS 101  General Physics  4
PHYS 102  General Physics  4

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
California State University – Long Beach
BUSA 101  Fundamentals of Accounting I  4
or BUSA 240  Cost Accounting  4
CIS 101  Introduction to Computer and Information Systems  3
ENGT 237  Graphical Statistics and Strength of Materials  3
or ENGR 235  Statics  3
MATH 112  Elementary Statistics  4
MATH 170  Calculus I  4

California State Polytechnic University – Pomona
ARCH 121  Materials and Methods of Building Construction  3
CHEM 111  General Chemistry  5
ENGR 235  Statics  3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include (1) Common Lower Division Preparation, (2) electives as needed, and (3) the Associate in Arts Degree requirements. CAREER OPPORTUNITIES: Construction Engineering Technology (CET) graduates work with owners, developers, architects, engineers, (civil, mechanical, and electrical), building departments, governmental agencies, contractors, and subcontractors to implement a variety of construction projects. Job titles include field engineer, project engineer, superintendent, as well as estimator, scheduler, and project manager.

See Cerritos College Graduation Requirements.
See State University General Education List.

INDUSTRIAL TECHNOLOGY-ELECTRONICS
OPTION TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY  UNITS
(ENGINEERING TECHNOLOGY)
CHEM 111  General Chemistry  5
ECON 201  Macroeconomics  3
EL 110  Principles of DC Electronics  4
EL 110L  DC Electronics Laboratory  1
EL 120  Principles of AC Electronics  4
EL 120L  AC Electronics Laboratory  1
EL 134  Digital Circuits and Computer Logic  3
EL 134L  Digital Circuits and Computer Logic Laboratory  1
ENGT 131  Fundamentals of Drafting Including AutoCAD  3
MATH 150  Precalculus Mathematics  4
PHIL 106  Introduction to Logic  3
PHYS 101  General Physics  4
PHYS 102  General Physics  4

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS
California State University – Long Beach
CIS 101  Introduction to Computer Information Systems  3
CIS 280  Object-Orientated Programming in C++  3
EL 200  Semi-Conductor Circuits  3
EL 200L  Semi-Conductor Circuits  1
ENGT 237  Graphical Statics and Strength of Materials  3
or ENGR 235  Statics  3
MATH 112  Elementary Statistics  4

California State Polytechnic University – Pomona
CIS 230  Assembly Programming for Microcomputers  4
ENGR 235  Statics  3

Other California State Universities that offer the Bachelor’s Degree: Chico, Fresno, San Jose, San Luis Obispo, and Sacramento. Consult catalogs of specific institutions for requirements.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include, (1) Common Lower Division Preparation, (2) electives as needed, and (3) the Associate in Arts Degree requirements. CAREER OPPORTUNITIES: The Electronics Option prepares the student for a position as a technologist, in such industries as aerospace, computers, communications, biomedical, chemical, power, etc. Students are offered a wide range of training in topics such as instrumentation, controls, microprocessors, microelectronics, biomedical electronics,
INDUSTRIAL TECHNOLOGY—
MANUFACTURING OPTION
TRANSFER PROGRAM

COMMUNICATIONS, Motors and Generators, Robotics, Computer Applications, Programming and Interfacing.

The Computer Option prepares graduates to pursue careers related to manufacturing, integration, and support of computer systems. Emphasis is placed on specific job skills required of entry level professionals in computer industry, including systems analysis and design, data administration, networking, data communications, data acquisition, oral and written communication, and management principles. The Computer Option is available to students interested in the manufacturing of computers and the applications and operations aspects of computer hardware and software.

See Cerritos College Graduation Requirements.
See State University General Education List.

INDUSTRIAL TECHNOLOGY—
QUALITY ASSURANCE CAREER PATHWAY
(The following curriculum does not lead to an Associate in Arts Degree)

The following program of study has been designed to prepare students for transfer to California State University, Long Beach—Engineering Technology.

BL 111 Business Law 3
CIS 101 Introduction to Computer Information Systems 3
CHEM 111 General Chemistry 5
ECON 201 Principles of Macroeconomics 3
ENGT 131 Fundamentals of Drafting Including AutoCAD 3
ENGT 237 Graphical Statistics and Strength of Materials 3
or ENGR 235 Statics (3)
MATH 112 Elementary Statistics 4
MATH 150 Pre-Calculus Mathematics 4
PHIL 106 Introduction to Logic 3
PHYS 101 General Physics 4
PHYS 102 General Physics 4

Quality Control Courses
MET 100A Metallurgy and Non-Metallic Materials 3
MET 120 Non-Destructive Testing 3
MTT 100 Machine Tool Introduction 2.5

CAREER OPPORTUNITIES: Graduates of the program will find jobs in quality engineering, quality assurance, product assurance, supplier assurance, configuration and data management, procurement, software quality assurance, production, operations, materials management, and industrial engineering departments of both large and small companies in all areas of the manufacturing and service industry.

See Cerritos College Graduation Requirements.
See State University General Education List.

INDUSTRIAL TECHNOLOGY—
AUTOMATED MANUFACTURING CERTIFICATE OF ACHIEVEMENT

MTT 100 Modern Manufacturing Concepts and Techniques 2.5
MTT 170 Computer Numerical Control Programming 4
PMT 66 Hydraulics and Pneumatics 3
EL 96A Introduction to Automated Manufacturing (Robotics) 4
EL 96B Automated Manufacturing (Advanced Robotics) 4
EL 110 Principles of DC Electronics 3
EL 110L DC Electronics Laboratory 1
EL 114 Fundamentals of Digital Electronics 3
EL 114L Fundamentals of Digital Electronics Lab 1
EL 124 Advanced Digital Electronics 3
EL 124L Advanced Digital Electronics Lab 1
EL 244 Introduction to Microcomputers 4

TOTAL UNITS 39

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) Common Lower Division Preparation, (2) electives as needed, and (3) the Associate in Arts Degree requirements.

CAREER OPPORTUNITIES: Graduates of the program will be employed in the manufacturing engineering, production, production control, procurement and materials management departments of both large and small companies in all areas of the manufacturing industry.

See Cerritos College Graduation Requirements.
See State University Colleges General Education List.
INTERNATIONAL STUDIES PROGRAM

GLOBAL POLITICS/DIPLOMACY CERTIFICATE OF ACHIEVEMENT

CORE REQUIREMENTS (Certificate of Completion)  UNITS
GEOG 105  World Regional Geography 3
POL 210  International Relations 3
BA 101  International Business 3

And One of the Following:
PHIL 200  World Religions 3
ANTH 100  Cultural Anthropology 3

Division Requirements
ENGL 106  Introduction to Language Study 3

Select 6 Units of the Following:
POL 230  Contemporary Political Issues: Middle East 3
HIST 211  History of America 3
HIST 265  Selected Problems in Contemporary Asiatic History 3
HIST 255  History of Russia and the Soviet Union 3
ECON 101  American Economic System 3

Total Certificate Requirements 24

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Global Politics/Diplomacy and complete electives and general education requirements to achieve a minimum of 60 units.

GLOBAL RESOURCES CERTIFICATE OF ACHIEVEMENT

CORE REQUIREMENTS (Certificate of Completion)  UNITS
GEOG 105  World Regional Geography 3
POL 210  International Relations 3
BA 101  International Business 3

And One of the Following
PHIL 200  World Religions 3
ANTH 100  Cultural Anthropology 3

Division Requirements
ENGL 106  Introduction to Language Study 3

Select 6 Units from the Following:
HIST 221  History of Americas 3
HIST 255  History of Russia and the Soviet Union 3
ECON 101  American Economic System 3

Total Certificate Requirements 24

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Global Resources and complete electives and general education requirements to achieve a minimum of 60 units.

INTERPRETING/TRANSLATING CERTIFICATE OF ACHIEVEMENT

CORE REQUIREMENTS (Certificate of Completion)  UNITS
GEOG 105  World Regional Geography 3
POL 210  International Relations 3
BA 101  International Business 3

And One of the Following
PHIL 200  World Religions 3
ANTH 100  Cultural Anthropology 3

Division Requirements
ENGL 106  Introduction to Language Study 3

And One of the Following Options
SPAN 282  Intermediate Conversational Spanish 3
SPAN 283  Advanced Conversational Spanish 3
FREN 202  Intermediate French 4
FREN 203  Intermediate French Advanced Level I 4
GERM 203  Scientific German 4
GERM 204  Scientific German 4
JAPN 102  Elementary Japanese 5
JAPN 201  Intermediate Japanese 5
SPAN 201  Intermediate Spanish 5

Total Certificate Requirements 24

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Interpreting/Translating and complete electives and general education requirements to achieve a minimum of 60 units.

WORLD CULTURES CERTIFICATE OF ACHIEVEMENT

CORE REQUIREMENTS (Certificate of Completion)  UNITS
GEOG 105  World Regional Geography 3
POL 210  International Relations 3
BA 101  International Business 3

And One of the Following
PHIL 200  World Religions 3
ANTH 100  Cultural Anthropology 3

Division Requirements
ENGL 106  Introduction to Language Study 3
HUM 100  The Art of Being Human 3

Select 6 Units from the Following
HIST 230  History of Mexico 3
HIST 260  Survey of Asiatic History 3

Total Certificate Requirements 24
PHIL 200 World Religions 3
ANTH 100 Cultural Anthropology 3
ANTH 202 Ancient Civilizations of the Americas 3
GEOG 102 Natural and Cultural Geography 3

TOTAL CERTIFICATE REQUIREMENTS 24

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

Meet the requirements for a Certificate of Achievement in World Cultures and complete electives and general education requirements to achieve a minimum of 60 units.

JOURNALISM

ASSOCIATE IN ARTS DEGREE PROGRAM

CORE REQUIREMENTS (19 units) 
JOUR 100 Introduction to Mass Communication 3
JOUR 101 Beginning Newswriting and Reporting 3
JOUR 103 Newspaper Article Writing 2
JOUR 105 Newspaper Production 2
JOUR 130 Photo Journalism 3
ART 188 Design for Desktop Publishing 3
CIS 121 Introduction to Internet 1.5
CIS 205 Programming in HTML for the World Wide Web 1.5

Department Requirements (10 units)
JOUR 110 Principles of Public Relations 3
JOUR 298 Directed Studies in Journalism 1
or JOUR 50L Editorial Board (1)
Plus a minimum of five units in additional Journalism courses--5

NOTE: Journalism students intending to transfer to a four-year college are referred to the Transfer Journalism Program of Study 145.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete a minimum of 60 units to include (1) the above Journalism courses and unit requirements, (2) AA Degree General Education Requirements, and (3) electives as needed.

CERTIFICATE OF ACHIEVEMENT

Journalism Major Department Core Requirements 19
Journalism Major Department Requirements 10
Journalism Certificate Requirements 9
BA 109--Marketing 3
or BA 110--Advertising (3)
JOUR 299--Directed Studies (should be internship experience) 2

CERTIFICATE ELECTIVES (2 UNITS MINIMUM)
PHOT 110 Digital Imaging 3
or ART 192 Photoshop/Digital Imaging (3)
TH 152 Introduction to Broadcasting 3
ART 194 Multimedia Design 3
ENGL 155 Technical Writing 3
PHOT 100 Introductory Photography 3
POL 101 American Political Institutions 3
SPCH 160 Parliamentary Procedure 1

TOTAL CERTIFICATE UNITS 38

BROADCAST JOURNALISM

CERTIFICATE OF ACHIEVEMENT

The certificate helps the student focus on the study of and preparation for entry level employment in the growing field of broadcast news at radio stations and television stations, and in online journalism ventures.

This certificate is one part of a two-part certificate combination that prepares the student for an associate degree in Broadcast Media. (See Certificate Radio-TV Announcing)

Broadcast Journalism Certificate Requirements--11
JOUR 100 Mass Media and Society 3
JOUR 101 Beginning Newswriting and Reporting 3
JOUR 112 Copy Editing Skills 1
JOUR 170 Broadcast News 1

Plus three units of the following:
JOUR 120 Internet for Journalists 2
JOUR 170 Broadcast News 1*
SPCH 100 Fundamentals of Oral Communication 3
SPCH 140 Oral Interpretation of Literature 3
SPCH 240 Oral Interpretation – Reader’s Theater 3
TH 108 Improvisation for Theater 3
TH 117 Stand-Up Comedy 3

TOTAL 11

*May be taken a maximum of 2 times may be applied.

RADIO/TELEVISION BROADCAST ANNOUNCING

CERTIFICATE OF COMPLETION

This certificate helps the student focus on the study of and preparation for entry level employment in the field of broadcast announcing at radio and television stations, and in online broadcast ventures. This is one of two certificate combination that will begin to prepare the student for an associate degree in Broadcast Media Broadcast Media. (See JOUR 141 – Broadcast Journalism)

JOUR 170 Broadcast News 1
RTV 152 Introduction to Broadcasting 3
RTV 155 Radio Production 3
or RTV 171 Occupational Work experience in Radio-TV* 1
RTV 298 Directed Studies in Radio-TV * (1)
SPCH 140 Oral Interpretation of Literature 3
SPCH 271 Voice and Articulation 3
TH 156 Video Production 3

TOTAL 17

*Should be a broadcasting-related internship

ONLINE JOURNALISM

CERTIFICATE OF ACHIEVEMENT

The certificate helps the student focus on the study of and preparation for entry level employment in the growing field of online journalism. The certificate should be particularly helpful to those who will be helping small publications start online news ventures.

Online Journalism Certificate Requirements—17
JOUR 100 Introduction to Mass Communications 3
JOUR 101 Beginning Newswriting 3
JOUR 120 Internet for Journalists 2
PHOT 110 Introduction to Digital Imaging 3
or ART 192 Photoshop/Digital Imaging  3

Plus one unit from the following:
JOUR 298 Directed Studies  1
or JOUR 50L Editorial Board  1

Plus two units from the following:
JOUR 103 Newspaper Article Writing  2
or JOUR 105 Newspaper Production  2

And three units from the following:
ART 196 Introduction to Designing Web Graphics  3
CIS 205 Programming in HTML for the World Wide Web  1.5
CIS 120 Web Design with Microsoft Front Page  1.5
PHOT 112 Intermediate Digital Photography  3

PHOTOJOURNALISM
CERTIFICATE OF ACHIEVEMENT

The certificate helps the student focus on the study of and preparation for entry level employment in the field of photojournalism. The certificate should be particularly helpful to those looking for employment at newspapers, magazines, corporate and government public relations departments and online journalism ventures.

PhotoJournalism Certificate Requirements--17
JOUR 130 Photo Journalism  3
PHOT 100 Introductory Photography  3
PHOT 110 Introduction to Digital Photography  3

Plus three units of the following:
BA 100 Fundamentals of Business  3
or BUSA 100 Introduction to Accounting  3

Plus five units from the following:
JOUR 105 Newspaper Production(can be repeated)  2*
JOUR 160L Magazine Production(can be repeated)  1**
JOUR 299 Directed Studies(maximum 1 unit)  1
BA 110 Advertising  3

*may be repeated; a maximum of four units may be applied
**may be repeated; a maximum of two units may be applied

PUBLIC RELATIONS
CERTIFICATE OF ACHIEVEMENT

Journalism Major Department Core Requirements  19
Journalism Major Department Requirements  10
Public Relations Certificate Requirements  9
BA 100 Fundamentals of Business  3
BA 114 Marketing  3
or BA 110 Advertising  3
JOUR 299 Directed Studies  2

CERTIFICATE ELECTIVE (1 UNIT MINIMUM)
PHOT 110 Digital Imaging  3
or ART 192 Photoshop/Digital Imaging  3
RTV 152 Introduction to Broadcasting  3
ART 194 Multimedia Design  3
ENGL 155 Introduction to Technical Writing  3
PHOT 100 Introductory Photography  3
SPCH 160 Parliamentary Procedure  1

TOTAL CERTIFICATE UNITS  38

See Cerritos College Graduation Requirements.

CAREER OPPORTUNITIES: The A.A. Degree, the Certificate in Public Relations, and the Certificate in Journalism by themselves, or with other education and degrees as appropriate, may directly or indirectly enhance employment potential in a broad job spectrum where media communications and related analytical skills are desirable. These include writer/reporter/editor for both print and broadcast/electronic journalism media (newspaper, magazine, radio, TV, etc.), corporate communications and public relations, public information and publicity, business and industrial journalism, newsletter writer and publisher, freelance writer, photographer, advertising copywriter and salesperson, journalism teacher and student publications adviser, non-fiction book and article writer, editorial and publications services consultant, and myriad other publishing and related areas.

JOURNALISM
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY  UNITS
JOUR 100 Introduction to Mass Communications  3
JOUR 101 Beginning News Writing and Reporting  3

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Fullerton
Journalism Concentration, Communications Major
JOUR 201 Advanced Reporting and Editing  3

Broadcast Journalism Concentration, Communications Major
TH 241 Writing for Movies and Television  3

Other Communication major concentrations are: Advertising; Entertainment Studies; Photo-Communications; Public Relations.

Please note that double counting of Journalism courses for general education is not permitted.

California State University – Long Beach

Note: All students entering journalism production classes at CSULB must be familiar with at least one established word-processing program, and be able to type at a rate of at least 40 words a minute.

California Polytechnic University, Pomona
Communication Journalism
JOUR 130 Photo Journalism  3
ART 188 Design for Desktop Publishing  3
PHOT 100 Introductory Photography  3

Note: Pomona does not require Journalism 101 for the Journalism major.

San Diego State University

ECON 201 Principles of Macroeconomics  3
POL 101 American Political Institutions  3
POL 201 Introduction to Political Science and American Government  3

Note: All prerequisites must be taken for a grade and completed with a minimum GPA of 2.85. Journalism is an impacted major and will require a personal statement, letters of recommendation and a cumulative GPA of 2.75 or higher. For additional information see a counselor.
THE UNIVERSITY OF CALIFORNIA

There is no Journalism major at any campus of the University of California.

NOTE: The ability to word process and use the Internet are prerequisites for all students majoring in Journalism. See the Fine Arts Counselor for lower division preparation for other California State University Broadcast Journalism programs.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete a minimum of 60 units to include: (1) the above required courses plus electives in Journalism and Photography for a minimum of 18 units, (2) AA Degree general education requirements and (3) electives as needed.

See Cerritos College Graduation Requirements.
See State University General Education List.

KINESIOLOGY
TRANSFER PROGRAM
(SEE PHYSICAL EDUCATION)

LIBERAL ARTS AND SCIENCES

In order to qualify for an A.A. degree in Liberal Arts and Sciences, the following requirements must be met:

1. Completion of the A.A. degree general education and proficiency requirements;
2. Completion of a minimum of 60 degree applicable units;
3. Completion of at least 18 units minimum including at least one course from category a, b, c, and d, below;
4. Additional units to complete the 18 units minimum must be selected from categories a, b, c, d, or e;
5. Courses counted toward the major may not be counted again for A.A. general education credit.

a. Communication and Analytical Thinking (one course is required)
   - English 103
   - Philosophy 106, 202
   - Psychology 103
   - Speech 100, 120, 130, 132, 150, 235

b. Fine Arts and Humanities (one course is required)
   - Architecture 112
   - Art 101,100, 102, 103, 104, 106, ART 107,110, 116, 108, 109, 120, 130A, 144, 150, 193
   - French 101, 102, 201, 202
   - German 102, 201, 202, 101
   - Humanities 100, 108, 109
   - Japanese 101, 102, 201, 202
   - Music 100, 101, 102, 104, 104B, 105
   - Photography 100, 160
   - Philosophy 100, 102, 200, 201, 204, 206
   - Physical Education 191
   - Sign Language 101, 102, 201
   - Spanish 101, 102+, 111, 112+, 201, 202, 206, 210

   *Course offered in more than one section, but may only be taken and counted in one section.

   + Credit Limitation. UC credit limitation may apply for certain courses in IGETC, as well as other UC transferable courses, which are not in IGETC. An explanation for each course appears in the college catalog course description. See a counselor for details.

MACHINE TOOL TECHNOLOGY

CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>MACHINIST OPTIONS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTT 30 CNC Shop Math</td>
<td>3</td>
</tr>
<tr>
<td>MTT 32 Setup and Operation of CNC Mills</td>
<td>3</td>
</tr>
<tr>
<td>MTT 33L Machinist Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>MTT 34 Blueprint Reading</td>
<td>2.5</td>
</tr>
<tr>
<td>MTT 35 Supplemental Machine Shop Studies</td>
<td>2</td>
</tr>
<tr>
<td>MTT 36 CNC Shop Inspection</td>
<td>2.5</td>
</tr>
<tr>
<td>MTT 37 Setup and Operation of CNC Lathes</td>
<td>3</td>
</tr>
</tbody>
</table>
MACHINIST TRAINEE
CERTIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
MTT 50 Machine Shop Mathematics 3
MTT 52 Setup and Operation of CNC Machinery 2.5
MTT 54 Blueprint Reading 2.5
MTT 60 Advanced Machine Tool Concepts 2.5
MTT 100 Machine Tool Introduction 2.5
MTT 170 Computer Numerical Control Programming 2.5

TOTAL CERTIFICATE REQUIREMENTS 15.5

MANUFACTURING TECHNOLOGY (MFGT)
CERTIFICATION OF COMPLETION REQUIREMENTS

The four and a half to six units for the specialty may come from the units completed toward the degree or from additional courses outlined below. Students with previous coursework may also be considered for certificates upon providing transcripts for review through the matriculation process.

Quality Assurance (QA)
MFGT 60 Quality Assurance (QA) 1.5
MFGT 55 Quality Control (QC) 1.5
MFGT 57 Total Quality Management (TQM) 1.5

4.5

Quality Control (QC)
MFGT 53 Statistical Process Control (SPC) 1.5
MET 120 Nondestructive Testing (NDT) 3.0

6.0

Statistical Process Control (SPC)
MFGT 53 Statistical Process Control (SPC) 1.5
TM 50 Technical Math 3.0

5.5

Total Quality Management (TQM)
MFGT 57 Total Quality Management (TQM) 1.5
MFGT 60 Quality Assurance (QA) 1.5
MFGT 59 Design of Experiments (DOE) 1.5
MFGT 58 Benchmarking 1.5

6.0

ISO 9000
MFGT 60 Quality Assurance (QA) 1.5
MFGT 55 Quality Control (QC) 1.5
MFGT 56 ISO 9000 1.5

4.5

Advanced Quality Systems (AQS)
MFGT 57 Total Quality Management (TQM) 1.5
MFGT 53 Statistical Process Control (SPC) 1.5
MFGT 58 Benchmarking 1.5
MFGT 59 Design of Experiments (DOE) 1.5

6.0
## MATHEMATICS
### TRANSFER PROGRAM

#### COMMON LOWER DIVISION PREPARATION

### FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 150</td>
<td></td>
</tr>
<tr>
<td>MATH 170</td>
<td></td>
</tr>
<tr>
<td>MATH 190</td>
<td></td>
</tr>
<tr>
<td>MATH 220</td>
<td></td>
</tr>
</tbody>
</table>

### AND UNIVERSITY OF CALIFORNIA

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 150</td>
<td></td>
</tr>
<tr>
<td>MATH 170</td>
<td></td>
</tr>
<tr>
<td>MATH 190</td>
<td></td>
</tr>
<tr>
<td>MATH 220</td>
<td></td>
</tr>
</tbody>
</table>

### California State University - Dominguez Hills

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 201</td>
<td></td>
</tr>
<tr>
<td>PHYS 202</td>
<td></td>
</tr>
<tr>
<td>PHS 203</td>
<td></td>
</tr>
</tbody>
</table>

### MATH EDUCATION OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 112</td>
<td></td>
</tr>
<tr>
<td>CIS 171</td>
<td></td>
</tr>
</tbody>
</table>

### California State University - Fullerton

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 178</td>
<td></td>
</tr>
<tr>
<td>MATH 240</td>
<td></td>
</tr>
</tbody>
</table>

- See a counselor for major concentrations. The coursework for a concentration is all upper division. Each student is required to complete one of the following concentrations: Pure Mathematics, Applied Mathematics, Probability & Statistics or Teaching Mathematics.

- Each student is also required to select one of the following cognates: Actuarial, Computer Science, Economics, Information Systems & Decision Science, Physics, Chemistry, Civil Engineering, Mathematics, or Research.

### COMPUTER SCIENCE COGNATE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 176</td>
<td></td>
</tr>
<tr>
<td>CIS 214</td>
<td></td>
</tr>
<tr>
<td>CIS 224</td>
<td></td>
</tr>
<tr>
<td>CIS 280</td>
<td></td>
</tr>
<tr>
<td>CIS 292</td>
<td></td>
</tr>
</tbody>
</table>

### ECONOMICS COGNATE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td></td>
</tr>
<tr>
<td>ECON 202</td>
<td></td>
</tr>
</tbody>
</table>

### PHYSICS/ENGINEERING COGNATE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 201</td>
<td></td>
</tr>
<tr>
<td>PHYS 202</td>
<td></td>
</tr>
<tr>
<td>PHYS 203</td>
<td></td>
</tr>
</tbody>
</table>

### CHEMISTRY COGNATE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td></td>
</tr>
<tr>
<td>CHEM 12</td>
<td></td>
</tr>
</tbody>
</table>

### CIVIL ENGINEERING COGNATE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 235</td>
<td></td>
</tr>
</tbody>
</table>

### California State University - Long Beach

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 280</td>
<td></td>
</tr>
<tr>
<td>PHYS 201</td>
<td></td>
</tr>
</tbody>
</table>

### APPLIED MATHEMATICS OPTION

The above listed requirements and PHYS 202

### STATISTICS OPTION

One of the following sequences is required:

- ECON 201 and ECON 202 or BIOL 120 and A&P 120 or six units in a field other than ECON or BIOL in which CSULB approved upper division statistics courses are also taken.

### MATH EDUCATION OPTION

One of the following sequences is required:

- PHYS 201 and PHYS 202 or PHIL 106 and lower division Symbolic Logic
  (PHIL 270 at CSULB) or eight units of a foreign language.

### California State University - Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 240</td>
<td></td>
</tr>
<tr>
<td>PHYS 201</td>
<td></td>
</tr>
<tr>
<td>PHYS 202</td>
<td></td>
</tr>
<tr>
<td>PHYS 203</td>
<td></td>
</tr>
</tbody>
</table>

- Beside the B.S. in Mathematics, CSULA also offers the B.A. in Mathematics which requires a minimum of 4 units from a list of additional electives in related areas: CHEM 111, 112, CIS 101, MATH 240, and PHIL 106. Required university general education course: ENGL 103 for B.A. or B.S. degree.

- NOTE: CSULA students are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

### California State Polytechnic University - Pomona

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 178</td>
<td></td>
</tr>
<tr>
<td>CIS 180</td>
<td></td>
</tr>
<tr>
<td>MATH 240</td>
<td></td>
</tr>
<tr>
<td>PHYS 201</td>
<td></td>
</tr>
<tr>
<td>PHYS 202</td>
<td></td>
</tr>
<tr>
<td>PHYS 203</td>
<td></td>
</tr>
</tbody>
</table>

- Major concentrations in Applied Mathematics, Secondary Teacher Prep, or Statistics require the same lower division preparation.

### University of California – Irvine

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 180</td>
<td></td>
</tr>
<tr>
<td>CIS 178</td>
<td></td>
</tr>
<tr>
<td>MATH 240</td>
<td></td>
</tr>
<tr>
<td>PHYS 201</td>
<td></td>
</tr>
<tr>
<td>PHYS 202</td>
<td></td>
</tr>
<tr>
<td>PHYS 203</td>
<td></td>
</tr>
<tr>
<td>MATH 240</td>
<td></td>
</tr>
</tbody>
</table>

- At the upper-division level, students may specialize in Applied and Computational Mathematics, Mathematics for High School Teaching, Statistics, or a concentration in Economics is also offered.

### University of California - Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 280</td>
<td></td>
</tr>
<tr>
<td>MATH 240</td>
<td></td>
</tr>
</tbody>
</table>

- The two above listed courses fulfill the lower division requirements for the B.A. in Mathematics.
**MATHEMATICS/B.S. OPTION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

TWO ADDITIONAL COURSES FROM:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
</tbody>
</table>

**MATHEMATICS OF COMPUTATION/B.S. OPTION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
</tbody>
</table>

**MATHEMATICS/APPLIED SCIENCE/B.S. OPTION**

**Actuarial Concentration or Operations Research Plan:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 240</td>
<td>Calculus and differential equations</td>
<td>4</td>
</tr>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Medical and Life Sciences Concentration Plan:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 202</td>
<td>Molecular Biology/Genetics</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

There are also concentrations plans in the following: Management Accounting and History of Science.

**MATHEMATICS/ECONOMICS/B.S. OPTION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>4</td>
</tr>
</tbody>
</table>

**University of California—Riverside**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>4</td>
</tr>
</tbody>
</table>

**B.S. IN COMPUTATIONAL MATH TRACK**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 292</td>
<td>Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>B.S. in Applied Math Track, Biology Option</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
</tbody>
</table>

**B.S. IN APPLIED MATH TRACK, CHEMISTRY OPTION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**B.S. IN APPLIED MATH TRACK, ECONOMICS OPTION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

**B.S. IN APPLIED MATH TRACK, ENVIRONMENTAL SCIENCE OPTION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Earth Environment</td>
<td>4</td>
</tr>
</tbody>
</table>

The Applied Math Track, Physics Option and the Applied Math Track, Statistics Option and the Blended Program for Secondary Education do not have any additional lower division course requirements.

Students intending to meet lower division requirements for any school or division of the University of California should consult the catalog of that institution in addition to checking the ASSIST.ORG Articulation website.

**ASSOCIATES IN ARTS DEGREE:**

Complete the above common lower division requirements and all AA degree general education requirements for a total of at least 60 units.

**CAREER OPPORTUNITIES:** Upon completion of the bachelor’s degree program, graduates qualify for graduate study in accounting, computer information systems, engineering, physics, economics and other related fields. Baccalaureate graduates also qualify for positions as an actuary and statisticians, appraisers, and estimators, financial analysts, financial planners, loan officers, marketing researchers, methods analyst, operations analyst, mathematicians in government and industry, secondary teaching and career opportunities in computer science.

**MEDICAL ASSISTANT**

**Length and Kind of Program**

Several options are available to those interested in working in the Ambulatory Care environment:

1. **Medical Assistant Certificate of Achievement**
   - This Medical Assistant program may be completed in two semesters when started with the fall semester. The focus is on both front office (administrative) and back office (clinical) responsibilities. The medical assistant program culminates in a clinical lab experience completed through an internship or occupational work experience.

2. **Medical Assistant Associate in Arts Degree**
   - The student must complete the requirements for a Certificate of Achievement in MedicalAssisting. In addition, the student must take A&P 120, electives, and general education requirements to achieve a minimum of 60 units. The length of time to complete this depends on the student’s curriculum load.

Full time students can complete this program in two semesters (8 months) when starting with the fall semester. Discussion with the department chair regarding questions on course selection is encouraged. Course selection for a full time student starting in the fall semester is recommended as follows:

**FALL:**
- MA 60, MA 62A, MA 62B, MA 64, MA 161, HO 53, HO 54, HO 55, HO 150 (elective).

**SPRING:**
- MA 66, MA 67, MA 68 or MA 73 or MA 74, Either HO 151 or HO 152 OR SPAN 223 (if chosen elective), PSYC 101 or PSYC 150, or equivalent.

Full time students starting in the Spring semester are advised to consult with the program chairperson regarding course selection(s).

The program is designed to help meet the needs of the part-time student as well. Course selection in numeral order is advised. Again, consult with the program chair regarding specific course selection questions. Some classes are offered in specific semesters and efficient planning is necessary.
PROGRAM REQUIREMENTS

Academic Requirement

The student may obtain a Certificate of Achievement or an Associate in Arts in Medical Assisting. The student must achieve a grade of "C" or better in required medical assisting and general education course work. (Twelve units of the Medical Assistant program must have been taken within the last five (5) years.) MA 67 and MA 68 have prerequisite courses, which must be completed with a grade of "C" or higher.

Expenses

A. See the college catalog for enrollment fees
B. The student may expect to spend approximately $600 for books, equipment (including watch with a second hand), and uniforms. Health screening will be at the student’s expense. This may include but is not limited to immunizations and CPR/First Aid certification completed at private agencies. Students are responsible for their own living accommodations, uniform laundry, and transportation to selected clinics.

Health

Employment in this field requires good vision, hearing, and the ability to communicate verbally, nonverbally and through written word. In addition, students must have the ability to comprehend, analyze, and evaluate patients’ charts in order to provide appropriate treatment. Students must be able to record in the patients’ charts and have the manual dexterity to use small instruments to provide patient care. The student must be able to work as a team player and demonstrate efficient customer service skills.

Internship and Occupational Work Experience

Health clearance requirements will vary depending on where clinical lab experiences will be completed (MA 68, MA 73, MA 74). To be placed in a health care facility where direct patient contact will occur (MA 68, MA 73, MA 74), the student must present evidence of compliance with facility health standards and current certification in CPR and First Aid training. The health standards will include, but are not limited to, T.B. testing and immunization. The Medical Assistant Program Record of Immunizations, Vaccination, and Test forms (located in HS room 106) must be completed before the first class session and prior to placement in the health care facility. Health clearance, CPR and First Aid requirements must be valid for the duration of the clinical affiliation. Student placements are predominately during the day hours.

CPR certification is also required for HO 53. It may be obtained through American Health Association (Health Care Provider) training (industry preferred). American Red Cross Professional/AED training or concurrent enrollment in HO 150 (fall semester only). Standard First Aid training is available through the American Red Cross.

CRIMINAL BACKGROUND CHECKS

Clearance of a criminal background check may be required prior to internship/work experience placement. Students who do not clear agency requirements are not eligible for clinical placement and will, consequently, be ineligible to continue in the course. If there is any concern regarding clearance of a criminal background check, please contact the Health Occupations Division for additional information.

MEDICAL ASSISTANT

CERTIFICATE OF ACHIEVEMENT

UNITS

MEDICAL ASSISTING
MA 60  Introduction to Medical Assisting  2
MA 62A  Health Insurance and Billing  1.5
MA 62B  ICD-9 and CPT Coding  1.5
MA 64  Medical Office Assisting  1.5
MA 66  Medications and Specialties  3
MA 67  Medical Office Administration  3
*MA 68  Medical Assisting Internship Experience  4
*MA 73  Medical Assisting Occupational Work Experience (3)
*MA 74  Medical Assisting Occupational Work Experience (4)
MA 161  Medical Terminology  3

HEALTH OCCUPATIONS
HO 53  Electrocardiography  1
HO 54  Medical Laboratory Skills  1
HO 55  Phlebotomy Procedures  1

PSYCHOLOGY
PSYC 101  General Introductory Psychology  3
or PSYC 150  Personal and Social Adjustment  (3)

ELECTIVES (Choose only one of the following):
HO 150  Professional/CPR and First Aid  3
(Fall semester only)
or SPAN 223  Spanish for Health and Medical Careers  3
(Or an equivalent)
or HO 151  Elements of Nutrition  2
or HO 152  Nutrition  (3)

TOTAL CERTIFICATE REQUIREMENTS  (29)30

*Students may select one of these options to complete the medical assisting internship requirement. Only one option can be selected and the course may not be repeated more than one time.

Students not currently employed in a medical office should enroll in MA 68. Students who are currently employed in a medical office up to 19 hours per week enroll in MA 73. Students who are currently employed in a medical office more than 20 hours per week enroll in MA 74.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

For an Associate in Arts degree a student must meet the requirements for a Certificate of Achievement in Medical Assisting. The student must take A&P 120, electives and general education requirements to achieve a minimum of 60 units. See Cerritos College Graduation Requirements.

CAREER OPPORTUNITIES: Upon completion of the program, employment is available as a medical assistant in a variety of settings: office clinic, hospitals, insurance companies, government agencies, pharmaceutical companies, and educational institutions. Job duties can entail front office (administrative) duties such as receptionist and insurance clerk to back office (clinical) duties such as assisting the provider of care of lab duties.

See Cerritos College Graduation Requirements.

119
MENTAL HEALTH WORKER
CERTIFICATE OF ACHIEVEMENT PROGRAM

MENTAL HEALTH WORKER CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INST 151</td>
<td>3</td>
</tr>
<tr>
<td>INST 152</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 271</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 272</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 273</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS 18

RECOMMENDED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 103</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 150</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 210</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 220</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 241</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 245</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 251</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 261</td>
<td>3</td>
</tr>
</tbody>
</table>

ASSOCIATES IN ARTS DEGREE REQUIREMENTS:

A minimum of 60 units must be completed to include: the core courses listed above, AA Degree general requirements, and at least six units of recommended courses.

NOTE: Although all of these courses are transferable to transfer as a Psychology Major refer to Psychology Transfer Program.

CAREER OPPORTUNITIES: The certificate and Associate in Arts degree with an emphasis on the Psychosocial Rehabilitation model are designed to qualify the graduate to enter the workforce as a paraprofessional in Community-Based Mental Health Programs. The graduates of these programs will be able to work with mentally ill individuals. In partnership with the individual and other paraprofessionals and professionals, the graduate will create a plan for the client to take care of finances, find employment and housing, use community resources, and possible help with participation in substance-abuse programs.

METALLURGY AND MATERIALS SCIENCE
CERTIFICATE OF ACHIEVEMENT PROGRAM

WELDING

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 100</td>
<td>2</td>
</tr>
</tbody>
</table>

METALLURGY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET 50</td>
<td>2</td>
</tr>
<tr>
<td>MET 100A</td>
<td>3</td>
</tr>
<tr>
<td>MET 120</td>
<td>3</td>
</tr>
<tr>
<td>MET 130A</td>
<td>2</td>
</tr>
</tbody>
</table>

CHEMISTRY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 100</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 110</td>
<td>(4)</td>
</tr>
</tbody>
</table>

TECHNICAL MATHEMATICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM 50</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 80</td>
<td>(4)</td>
</tr>
<tr>
<td>or MATH 140</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Total Certificate Requirements: 31 (32)

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include: (1) the above requirements for the Certificate of Achievement, (2) BCOM 148 or ENGL 100; or PHYS 100, or PHYS 101; MFGT 100, (3) the Associate in Arts Degree general education requirements, and (4) electives as needed.

RECOMMENDED ELECTIVES: MTT 170, ENGT 153

CAREER OPPORTUNITIES: The metallurgical technician may work several areas, such as metallographic lab, heat treating, quality control, research, non-destructive testing, physical testing, and engineering liaison.

See Cerritos College Graduation Requirements.
Curricula, Requirements for Majors, Certificates and Transfer Programs

Welding Metallurgy Specialty
MET 51 Welding Metallurgy 2.0
MET 52L Metallurgy Specialty Lab 0.5
MET 100A Metallurgy I 3.0
__
5.5

Quality Specialty
MET 52L Metallurgy Specialty Lab 0.5
MFGT 53 Statistical Process Control (SPC) 1.5
MFGT 60 Quality Assurance (QA) 1.5
MET 100A Metallurgy I 3.0
__
6.5

MICROBIOLOGY
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY
AND THE UNIVERSITY OF CALIFORNIA

BIOL 200 Principles of Biology 5
BIOL 201 Principles of Biology 5
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills
(Option within the Biology major)
MATH 112 Elementary Statistics 4
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4
or MATH 170 Analytic Geometry and Calculus I (4)
PHYS 101 General Physics (4)
and PHYS 102 General Physics (4)
or PHYS 201 Engineering Physics (4)
and PHYS 202 Engineering Physics 4
and PHYS 203 Engineering Physics 4

California State University – Long Beach
(Option with the Biology major)
MICRO 200 Principles and Applications of Microbiology 5
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4
or MATH 170 Analytic Geometry and Calculus I (4)
PHYS 101 General Physics 4
PHYS 102 General Physics 4

California State University – Los Angeles
ENGL 103 Critical and Argumentative Writing 3
MICRO 200 Principles and Applications of Microbiology 5
CHEM 205 Quantitative Analysis Chemistry 4
MATH 140 Trigonometry 3
MATH 150 Pre-Calculus Mathematics 4
PHYS 101 General Physics 4
PHYS 102 General Physics 4

NOTE: CSULA student are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

California State Polytechnic University – Pomona
(Microbiology Option or Medical Technology Option)
MICRO 200 Principles and Applications of Microbiology 5
A&P 201 Human Physiology (Required for Medical Technology Option Only) 5
CHEM 205 Quantitative Analysis Chemistry 4
PHYS 101 General Physics 4
PHYS 102 General Physics 4

See a counselor for further information

University of California – Los Angeles
(Microbiology, Immunology and Molecular Genetics)
BIOL 202 Molecular Biology/Genetics 4
CHEM 211 Organic Chemistry 5
CHEM 212 Organic Chemistry 5
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
PHYS 203 Engineering Physics 4
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include: (1) the above common lower division preparation and MICRO 200, (2) electives as needed, and (3) the Associate in Arts Degree requirements.

CAREER OPPORTUNITIES: Bachelor's Degree programs with an emphasis in Microbiology are designed to qualify the student for graduate study in the field. Careers include employment in various types of Federal employment; State Civil Service work such as Public Health Microbiologist; industrial microbiological work in divergent fields such as the pharmaceutical industry, brewing, industrial fermentations, and the dairy industry; work as a hospital microbiologist or research technician positions in university research projects.

See Cerritos College Graduation Requirements.

See State University General Education List.

MUSIC
PIANO CERTIFICATE OF COMPLETION

The two-level Certificate of Completion piano teaching program is designed to include the following objectives:
To improve skills at the keyboard
To develop knowledge of music theory and history
To explore group and private piano teaching methods
To develop communication and organizational skills
To gain resourceful materials in the area of pedagogy and other related areas.

A Certificate of Completion in Teaching Beginning Piano will be granted upon completion of 16.5 required units with a minimum grade point of 2.0. A second Certificate of Completion in Teaching Intermediate Piano will be granted upon completion of 13.5 units with a minimum grade point of 2.0. piano teaching certificate courses are as follows:

BA 153 Small Business Management 3
MUS 105 Music Fundamentals 3
MUS 106 Music Theory/Musicianship I 5
MUS 147 Basic Applied Music 1
MUS 148 Private Study/Recital I 1
MUS 152 The Art of Teaching Beginning Piano 2
MUS 154 Piano Ensemble 1.5

TOTAL: 16.5
TEACHING INTERMEDIATE PIANO

CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 107</td>
<td>Music Theory/Musicianship II</td>
<td>5</td>
</tr>
<tr>
<td>MUS 149</td>
<td>Private Study/Recital II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 150</td>
<td>Private Study/Recital III</td>
<td>1</td>
</tr>
<tr>
<td>MUS 153</td>
<td>The Art of Teaching Intermediate Piano</td>
<td>2</td>
</tr>
<tr>
<td>MUS 154</td>
<td>Piano Ensemble</td>
<td>1.5</td>
</tr>
</tbody>
</table>

TOTAL: 13.5

MUSIC—COMMERCIAL ASSOCIATE IN ARTS DEGREE

REQUIRED MUSIC COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 104</td>
<td>American Popular Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 104B</td>
<td>History of Rock Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 106, 107</td>
<td>Music Theory/Musicianship I, II</td>
<td>5-5</td>
</tr>
<tr>
<td>MUS 112</td>
<td>Elementary Piano I</td>
<td>2.5</td>
</tr>
<tr>
<td>MUS 135</td>
<td>This Business of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 144, 145</td>
<td>Electronic Synthesizer I, II</td>
<td>2-1</td>
</tr>
<tr>
<td>MUS 146</td>
<td>Recording Techniques</td>
<td>2</td>
</tr>
</tbody>
</table>


TOTAL: 32.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

A minimum of 60 units to include: (1) The above music course and unit requirements, (2) the A.A. Degree general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Professional stage band; club work; arranging; copying; radio, television, choral groups; music stores; studio teaching; instrument repair.

MUSIC—GENERAL ASSOCIATE IN ARTS DEGREE

Theory, private study/recital, and performance classes are required each semester of full-time program (4 semesters). Placement in the appropriate level of theory and private study is made by the Music Department.

REQUIRED MUSIC COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 106, 107</td>
<td>Music Theory/Musicianship I, II</td>
<td>5, 5</td>
</tr>
<tr>
<td>MUS 148, 149</td>
<td>Private Study/Recital I, II</td>
<td>1, 1</td>
</tr>
<tr>
<td>MUS 150</td>
<td>Private Study/Recital III</td>
<td>1</td>
</tr>
<tr>
<td>MUS 151</td>
<td>Private Study/Recital IV</td>
<td>1</td>
</tr>
</tbody>
</table>

One course from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 101, 102, 103, 104, or 104B</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>


TOTAL: 40-46

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

A minimum of 60 units to include: (1) The above music course and unit requirements, (2) the A.A. Degree general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Music therapist, music librarian, private instrument teacher, music supervisor, concert hall manager, stage manager, cantor, choir section leader, music journalist, music publicist, music publisher, music shop manager, instrument sales representative, intern in music industry, arranger, orchestrator, copyist, sales person, program director for radio, piano tuner-technician, background vocalist, studio (session) musician, and songwriter.

MUSIC TRANSFER PROGRAM

TRANSFER MUSIC MAJORS: Theory, private study/recital, and performance classes are required each semester of full-time program (4 semesters). In addition, a full year of music history and literature is generally required.

Most four-year colleges and universities administer a piano proficiency examination that must be passed by all music majors at their campus. Placement in the appropriate level of theory and private study is made by the Music Department.

Portfolio and/or auditions may be required for entrance into music major. See counselor or university catalog for more information.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 148, 149, 150, 151</td>
<td>Private Study/Recital I, II, III, IV</td>
<td>1, 1, 1, 1</td>
</tr>
</tbody>
</table>

VOICE STUDENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 116, 117</td>
<td>Voice Class I, II</td>
<td>2-2</td>
</tr>
<tr>
<td>MUS 112, 113</td>
<td>Elementary Piano Class I, II</td>
<td>2-2</td>
</tr>
</tbody>
</table>

INSTRUMENTALISTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 112, 113</td>
<td>Elementary Piano Class I, II</td>
<td>2-2</td>
</tr>
</tbody>
</table>


ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Fullerton

In addition to the common lower division transfer music major preparation listed above, allied requirements state a proficiency in foreign language French, Italian, or German (preferred) to be satisfied by one of the following:

a) 4 years of foreign language in High School
b) Passing an exam given by the foreign language department
c) Completing the second semester of the beginning college sequence (French 102 or German 102)
California State University – Long Beach

All entering transfer students are required to take a theory placement test, complete a performance audition which are regularly administered during the fall and spring semester and pass a piano proficiency examination regardless of performance area (piano majors excepted)

University of California – Irvine

It is recommended that transfer students enter the major with college-level private instrumental or voice instruction; two years of music theory; the history of western music; ear-training; sight-singing; sight-reading; and piano. All transfer students must pass a performance audition in order to declare a major in either the B.A. or B.Mus. degree program.

University of California – Los Angeles

In addition to the common lower division transfer music major preparation listed above for transfer music majors, students must complete one year of college level foreign language. All applicants for admission are required to pass an audition in their principal performing medium.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete a minimum of 60 units to include (1) the above course requirements, (2) the AA Degree general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: The transfer upper division programs are designed to prepare students for careers in teaching, performance, conducting, arranging in such areas as studio performance, music businesses, opera companies, symphony orchestras, commercial music groups, church music, music therapy.

See Cerritos College Graduation Requirements.
See State University General Education List.

NATURAL SCIENCES—GENERAL

ASSOCIATE IN ARTS DEGREE

In order to qualify for an A.A. degree in Natural Sciences - General, the following requirements must be met:

1. Completion of the A.A. degree general education and proficiency requirements;
2. Completion of a minimum of 60 degree applicable units;
3. Completion of at least 18 units of science related coursework from the following:
   a. courses in the Physical Sciences
   b. courses in the Biological Sciences
   c. a course in Mathematics above Intermediate Algebra

See Cerritos College Graduation Requirements.

NURSING

The Cerritos College Nursing Program, approved by the Board of Registered Nursing and accredited by the National League for Nursing Accrediting Commission, Inc., offers an opportunity to prepare for a nursing career through mastery of a specific body of knowledge and skills. To qualify for the program, students must successfully complete prerequisite courses and other requirements as stated below. The generic program (Option A) consists of four semesters of sequenced courses. Students may receive credit for prior nursing courses to facilitate advanced placement. These students include Licensed Psychiatric Technicians, Licensed Vocational Nurses, students transferring from other accredited programs, and foreign-educated nurses.

For successful completion of the nursing program, the student is required to achieve a minimum 75% in all nursing and nursing-related courses. This is consistent with the Board of Registered Nursing's standard of competency for nursing practice. Completion of the program meets qualifications for the NCLEX-RN licensing exam.

PHILOSOPHY

Nursing is defined as a science, discipline and health care practice that focuses on the assessment, diagnosis and treatment of clients having health programs within the domain of nursing. The goals of nursing practice focus on health promotion, illness prevention, rehabilitation, and supporting the resources of the person who is ill or threatened with illness in adapting to changes within the environment.

In addition to implementing the philosophy of the College, the purpose of the Nursing Department is to provide the community with registered nurses who are capable of functioning in a variety of health care settings. To accomplish this, the Roy Adaptation Model has been selected as the primary conceptual framework. Within this framework, nurses recognize their clients as biopsychosocial beings in constant interaction with the environment. In periods of health, individuals have both innate and learned behavioral mechanisms which enable them to cope with their complex internal and external environments. In times of stress, the client's coping mechanisms may be disrupted and the individual is defined as ill. The client's health status is defined on a continuum from wellness to illness.

Nursing practice focuses on adaptation of the client in four major modes: physiological, self-concept, role function, interdependence. The program prepares students to understand individuals as total beings and to recognize and respect a diversity of spiritual and cultural/ethnic values.

ROLE OF THE ASSOCIATE DEGREE NURSE

The Associate Degree Nurse (ADN) graduate is prepared to function as a Provider of Care, Manager of Care and Member of the Discipline of Nursing. As Provider of Care, the ADN utilizes the nursing process as a basis for decisions regarding delivery of care. As a Manager of Care, the ADN collaborates with other health care providers in organization and delegation of care. As a Member of the Discipline of Nursing, the graduate is committed to professional growth, continuous learning and self-development. In fulfilling these roles, the ADN graduate utilizes critical thinking, demonstrates clinical competence, and is accountable for and committed to the value of caring.

Nursing graduates are employed in a health care delivery system that continues to grow and change. The ADN graduate is an entry-level practitioner and is competent to practice as a direct caregiver in a variety of structured settings in which service is provided to diverse client populations. ADN graduates may subsequently pursue bachelor's, master's and doctoral degrees in nursing in preparation for advanced levels of practice.

CONCEPT OF EDUCATION

Nursing faculty believe that Nursing education is driven by the application of critical thinking and development/improvement of teaching/learning strategies using innovative approaches and evidenced based research. Nursing faculty also believe that the purpose of education is to enlighten and enhance the quality of life for the student, the community and clients for who students and graduates provided care. Education based on mastery learning is viewed by the nursing faculty as a collaborative process involving college administrators and staff, nursing faculty and nursing students. Each student enters the nursing program with unique characteristics, capabilities, learning styles, and motivation to learning. To address these differences, learning experiences are structured from simple to complex.
The goal of the program is to promote students’ creative and critical thinking and personal growth based on successful learning experiences. Achievement of this goal is fostered by encouraging self-direction and by providing a variety of individual and group learning experiences. Students are expected to participate actively in the learning process.

ADMISSION REQUIREMENTS

The nursing program welcomes all applicants. To be considered for acceptance into the program, the applicant must meet the following requirements:

1. High school graduation or the equivalent.
2. Satisfactory completion of READ 54, MATH 60 and ENGL 52 or equivalent with grades of Credit or “C” or higher or the college placement test process. LVN applicants selecting the 30-unit option are required to complete the placement test process for advisement purposes but are not required to complete these courses.
3. Completion of or current enrollment in prerequisite courses with grades of “C” or higher. In-progress prerequisite courses must be completed with grades of “C” or higher during semester of application to maintain eligibility to enter program.
4. 2.5 gpa in prerequisite courses: A&P 150, A&P 151, MICR 200, and ENGL 100. A&P 150, A&P 151, and MICRO 200 are recommended to be completed within six (6) years of admission.
5. Overall minimum of 2.0 Grade Point Average for all college work.

PROGRAM PREREQUISITES

Option A: A&P 150, A&P 151, MICR 200, and ENGL 100
Option B: Same as Option A plus NRSG 25, NRSG 211, NRSG 213A, NRSG 251, PSYC 251, and possession of a valid California LPT license
Option C: Same as Option A plus NRSG 26, NRSG 215, NRSG251, PSYC 251, pass a departmental math competency exam, and possession of a valid California LVN license and at least one (1) year of acute care experience in a skilled nursing or hospital based facility
Option D: A&P 151, MICR 200, NRSG 215, pass a departmental math competency exam, and possession of a valid California LVN license
Option E: Same as Option A plus NRSG 25 or NRSG 26, NRSG 200, NRSG 215, NRSG 251, and PSYC 251
Option F: NRSG 26 and NRSG 215. Applicants must meet with the Director of Nursing and submit valid letter of referral from the California Board of Registered Nursing

All applicants must complete the prerequisites listed above or equivalents with grades of Credit or “C” or higher. Option A, B, C, and E applicants must show successful completion of READ 54, ENGL 52, and MATH 60 equivalents with grades of Credit or “C” or higher or satisfactory completion of the college placement test process. Option D applicants are required to complete the placement test process for advisement purposes but are not required to complete these courses.

Option D, E, and F applications will be notified individually for additional requirements relative to their entry point in the program.

APPLICATION PROCESS:

Step 1: If not previously enrolled at Cerritos College, the applicant should go to Admissions and Records (in Administration Building on Alondra Boulevard) and complete an application for admission.

Step 2: The applicant should then complete the College's assessment test process. Test schedules are available in the Counseling Department. If assessment test requirements may already have been met by equivalent measures, the applicant should see a counselor for options.

Step 3: The applicant should arrange to submit transcripts to the Nursing Department upon admission to the Nursing program you must submit official copies of all transcripts to the admissions and records office.

a. Official high school transcript or GED score and transcripts of any college work completed or in progress at colleges other than Cerritos College should be sent to: Cerritos College, Admissions and Records Office, 11110 Alondra Blvd., Norwalk, CA 90650.

b. Transcripts (official or unofficial) for the above coursework and for work completed or in progress at Cerritos College to: Cerritos College, Health Occupations Division, Nursing Department, 11110 Alondra Blvd., Norwalk, CA 90650.

Step 4: After assessment tests have been completed and transcripts sent, the applicant should make an appointment with a counselor by calling 562-860-2451, ext. 2231; specifying that this is for completion of a nursing application. Sealed official copies of transcripts are required in order to complete the application process. Transcripts maybe hand carried to the appointment.

Step 5: When the applicant has completed the first page of the application and the counselor has completed the second page of the application, the applicant must bring or send the application to: Cerritos College, Health Occupations Division, Nursing Department, 11110 Alondra Blvd., Norwalk, CA 90650.

Although applications may be submitted at any time, all applications and required documentation must be in the Health Occupations Division Office not later than October 1 for January admission and March 1 for August admission. Applicants can have no more than two (2) prerequisite courses in progress. It is the applicant's responsibility to make sure that all materials are submitted by the deadline.

Selection criteria are being updated and can be obtained from the Health Occupations Division Office and Counseling.

SELECTION PROCEDURES AND STANDARDS

1. No application materials will be considered after the specified deadline (March 1 for Fall applicants and October 1 for Spring applicants).

2. The applicant must submit to the Health Occupations Division the following items:
   a. A completed application signed by the applicant and a Cerritos College counselor
   b. Verification of high school graduation or GED completion
   c. Transcripts and work-in-progress verification
   d. Assessment test results or indication by counselor that this requirement has been met
   e. Any additional items required for specific option (see below)
3. LVN applicants and transfer students seeking entry at NRS 222 will be scheduled for a medication calculation examination. Information regarding this examination will be provided prior to the testing date.

4. Option A applicants will be notified as to whether or not they were accepted into the nursing program approximately two weeks after the completion of the selection process.

5. Students accepted into the nursing program and those identified as alternates are required to attend an orientation meeting. During the meeting, information will be given regarding textbooks, uniforms, registration procedures, and other content.

6. Applicants, who have prerequisite course(s) in progress at the time of application, must submit proof of passing the course(s) with a grade of “C” or higher prior to admission.

7. All eligible students who apply prior to the October 1, 2006 deadline will be admitted by the lottery/wait list process. Students who apply after the October 1, 2006 deadline will be admitted by selection criteria that is being updated and can be obtained from the Health Occupations Division and Counseling.

8. Student Rights: The nursing student has certain rights in addition to those reflected in the College Student Handbook. These include:
   a. The right to contact professional nursing boards regarding concerns about the educational program.
   b. The right to know of the existence of a policy giving credit for previous nursing education and/or experience.

LENGTH OF PROGRAM AND ANTICIPATED EXPENSES

The core nursing program consists of sequenced courses over a four-semester period. Prerequisite courses are completed prior to these four semesters. In addition general education courses are required for completion of the Associate in Arts degree in nursing (Associate Degree in Nursing – ADN). Some students may need to take additional courses to meet English, reading and mathematics requirements.

Each unit costs $26 for California residents, $151 for non-residents of California and $177 for international students. A College Services ID fee ($10) and Health Services Fee ($13) are assessed each semester.

During the four core semesters, lab material fees total approximately $400, textbooks approximately $1500, and additional supplies and uniforms approximately $350. Students are responsible for their own living arrangements, uniform laundry and transportation to clinical agencies. Application fees for licensure as a registered nurse range from $330 to $370.

Information about costs of NLNAC-accredited nursing programs is available from the National League for Nursing Accrediting Commission, Inc., 61 Broadway, 33rd floor, New York, NY 10006; telephone (800) 669-1656, ext 153 or www.nlnac.org.

ATTENDANCE

All students are expected to observe the attendance requirements of the Nursing Program as stated in the Nursing Program Student Handbook.

PROMOTION/PROGRESSION

In order to remain enrolled in and complete the program, the student must maintain a “C” grade or higher in all nursing courses and those general education courses specified by the California Board of Registered Nursing for completion of the nursing program. These courses include: PHIL 104, PSYC 251, and SPCH 100, SPCH 120, SPCH 130, SPCH 132, or SPCH 150. In combined nursing lecture/lab courses, the student must receive a minimum of “C” in lecture and a satisfactory grade in lab in order to successfully complete the course.

CRIMINAL BACKGROUND CHECK

Clinical placements are a mandatory component of the curriculum and may require clearance of a criminal background check. Students who do not clear agency requirements are not eligible for clinical placement and will, consequently, be ineligible to continue in the program. If there is any concern regarding clearance of a criminal background check, please contact the Health Occupations Division for additional information.

REGISTERED NURSE LICENSE APPLICATION

At the completion of the fourth semester of the Nursing Program, the nursing student files an application for licensure (NCLEX-RN) with the Board of Registered Nursing. The application and examination registration fee is $275. In addition, the student may apply for an interim permit for $30. These fees are subject to change by the Board of Registered Nursing.

As stated in the Board of Registered Nursing’s application for licensure:

Applicants are required under law to report all misdemeanor and felony convictions. “Driving under the influence” convictions must be reported. Convictions must be reported even if they have been expunged under Penal Code 1203.4 or even if court ordered diversion program has been completed under the Penal Code or under Article 5 of the Vehicle Code. Also, all disciplinary action against an applicant’s registered nurse, practical nurse, vocational nurse, or other professional must be reported. Failure to report prior convictions or disciplinary action is considered falsification of application and is grounds for denial of licensure or revocation of license. To make a determination [regarding eligibility for licensure] the Board considers the nature and severity of the offense, additional subsequent acts, recency of acts or crimes, compliance with court sanctions, and evidence of rehabilitation.

NURSING PROGRAM OPTIONS

There are six enrollment options in the Nursing Program:

A. Associate in Arts Degree (also referred to as the “generic” option or Associate Degree in Nursing)
B. LPT-ADN (Licensed Psychiatric Technician to Associate Degree in Nursing)
C. LVN-ADN (Licensed Vocational Nurse to Associate Degree in Nursing)
D. LVN-30 Unit Option (LVN + 30 units qualifying for NCLEX-RN, non-degree)
E. Transfer and Challenge
F. Board of Registered Nursing Referral

For Options A, B, C, and E – To graduate with an Associate in Arts Degree in Nursing, the student is required to complete, in addition to the nursing core courses and nursing-related courses, the following general education courses: PSYC 251, PHIL 104, and SPCH 100, SPCH 120, SPCH 130, SPCH 132, or SPCH 150 and one (1) 3-unit course from U.S. History or American Government (U.S. History or American Government courses chosen from Plan A, Sections B1 or B2) as listed in the College’s General Education Requirements found in the College General Catalog and Schedule of Classes. Option A students desiring to matriculate to the CSU or UC system should also take PSYC 101 and SOC 101 or ANTH 100. For additional information, please refer to CSU or UC program requirements.
**OPTION A – ASSOCIATE IN ARTS DEGREE**

**PREREQUISITES:**
A&P 150, A&P 151, ENGL 100, and MICR 200 or equivalents with grades of Credit or “C” or higher. Successful completion of READ 54, MATH 60, and ENGL 52 or equivalents with grades of Credit or “C” or higher or the college placement test process.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 210 <strong>Fundamentals of Nursing</strong></td>
<td>5.0</td>
</tr>
<tr>
<td>NRSG 211 <em>Introduction to Theoretical Framework</em></td>
<td>0.5</td>
</tr>
<tr>
<td>NRSG 212 <strong>Medical-Surgical Nursing 2</strong></td>
<td>5.0</td>
</tr>
<tr>
<td>NRSG 213A <em>Major Drugs and Nursing Management I</em></td>
<td>0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 213B <em>Major Drugs and Nursing Management II</em></td>
<td>1.0</td>
</tr>
<tr>
<td>NRSG 220 <strong>Medical-Surgical Nursing 3</strong></td>
<td>5.5</td>
</tr>
<tr>
<td>NRSG 222 <strong>Maternal/Child Nursing</strong></td>
<td>5.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 3</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 230 <strong>Psychosocial and Community Nursing</strong></td>
<td>5</td>
</tr>
<tr>
<td>NRSG 232 <strong>Medical-Surgical Nursing 4</strong></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 4</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 240 <strong>Medical-Surgical Nursing 5</strong></td>
<td>5</td>
</tr>
<tr>
<td>NRSG 242 <em>Professional Role Transition</em></td>
<td>3</td>
</tr>
</tbody>
</table>

**OPTION B - LPT-ADN MOBILITY PROGRAM**

The Nursing Program offers qualified Licensed Psychiatric Technician applicants an opportunity to prepare for professional nursing through the pursuit of specific knowledge and skills. Graduates from the program, in addition to receiving an Associate in Arts Degree, are eligible for the NCLEX-RN examination for licensure as a registered nurse.

**PREREQUISITES:**
A&P 150, A&P 151, MICR 200, ENGL 100, NRSG 26, NRSG 215, PSYC 251, and NRSG 251, or equivalent with grades of Credit or “C” or higher. Successful completion of READ 54, MATH 60 and ENGL 52 or equivalent with grades of Credit or “C” or higher or the college placement test process. Valid California LPT license. Completion of a medication calculation examination with a score of 80% or higher and at least one (1) acute care experience in a skilled nursing or hospital based facility.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 230 <strong>Psychosocial and Community Nursing</strong></td>
<td>5</td>
</tr>
<tr>
<td>NRSG 232 <strong>Medical-Surgical Nursing 4</strong></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 240 <strong>Medical-Surgical Nursing 5</strong></td>
<td>5</td>
</tr>
<tr>
<td>NRSG 242 <em>Professional Role Transition</em></td>
<td>3</td>
</tr>
</tbody>
</table>

**OPTION C - LVN-ADN MOBILITY PROGRAM**

The Nursing Program offers to qualified Licensed Vocational Nurse applicants an opportunity to prepare for professional nursing through the pursuit of specific knowledge and skills. Graduates from the program, in addition to receiving an Associate in Arts Degree, are eligible for the NCLEX-RN examination for licensure as a registered nurse.

**PREREQUISITES:**
A&P 150, A&P 151, MICR 200, ENGL 100, NRSG 26, NRSG 215, PSYC 251, and NRSG 251, or equivalent with grades of Credit or “C” or higher. Successful completion of READ 54, MATH 60 and ENGL 52 or equivalent with grades of Credit or “C” or higher or the college placement test process. Valid California LVN license. Completion of a medication calculation examination with a score of 80% or higher.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 230 <strong>Psychosocial and Community Nursing</strong></td>
<td>5</td>
</tr>
<tr>
<td>NRSG 232 <strong>Medical-Surgical Nursing 4</strong></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 240 <strong>Medical-Surgical Nursing 5</strong></td>
<td>5</td>
</tr>
<tr>
<td>NRSG 242 <em>Professional Role Transition</em></td>
<td>3</td>
</tr>
</tbody>
</table>

**OPTION D - LVN-30 UNIT OPTION**

The Nursing Program offers qualified Licensed Vocational Nurse applicants an opportunity to prepare for registered nurse licensure by completing thirty (30) units of college course work. The LVN who completes the thirty units designated by Cerritos College is eligible for the NCLEX-RN examination for licensure as a registered nurse.

**PREREQUISITES:**
A&P 151, MICR 200, NRSG 215 or equivalent with grades of Credit or “C” or higher. Optional Courses: NRSG 251 (strongly recommended), NRSG 26, and PSYC 251. Completion of the college placement test process for advisement purposes. Valid California LVN license. Completion of a medication calculation examination with a score of 80% or higher.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 230 <strong>Psychosocial and Community Nursing</strong></td>
<td>5</td>
</tr>
<tr>
<td>NRSG 232 <strong>Medical-Surgical Nursing 4</strong></td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 240 <strong>Medical-Surgical Nursing 5</strong></td>
<td>5</td>
</tr>
<tr>
<td>NRSG 242 <em>Professional Role Transition</em></td>
<td>3</td>
</tr>
</tbody>
</table>

**OPTION E - TRANSFER AND CHALLENGE**

**PREREQUISITES:**
A&P 150, A&P 151, MICR 200, HO 152, NRSG 25 or NRSG 26, NRSG 200, NRSG 215, NRSG 251, and PSYC 251 or equivalent with grades of Credit or “C” or higher. READ 54, MATH 60 and ENGL 52, or equivalent
with grades of Credit or “C” or higher or the college placement test process. Completion of a medication calculation examination with a score comparable to level of admission. Students applying under this option will be notified individually for additional requirements relative to their entry points in the curriculum.

**CREDIT GRANTING POLICY:**

Students who have successfully completed academic courses and/or have relevant knowledge and/or skills acquired in other than an accredited institution will be given advanced standing in the nursing program upon verification of such knowledge and/or skills.

**TRANSFER CREDIT**

A. Credit will be granted for related previous education completed in:
   1. Accredited Vocational or Practical Nursing courses
   2. Accredited Registered Nursing courses
   3. Accredited Psychiatric Technician courses
   4. Other related courses (e.g. Anatomy and Physiology, Nutrition)

B. Official transcripts and/or copies of certificates of completion must be submitted for credit to be granted.

C. Credit will be granted based upon the content and hours of transferring courses and must be equivalent to courses in the Cerritos College Nursing Program.

**CHALLENGE CREDIT (Competency-based)**

A. Credit may be granted for relevant knowledge and/or skills acquired through prior experience, courses in non-accredited institutions, and individual study which are essentially equivalent to a course for which credit is being requested.

B. Credit shall be determined by successful completion of a comprehensive written examination and/or practical evaluation.

C. Objectives for both the written and/or practical examinations are made available to the student prior to evaluation.

D. Student must meet the requirements which govern credit by examination as stated in the college catalog.

E. A minimum of twelve (12) units of the nursing curriculum must be in residency at Cerritos College in order to receive the Associate Degree in Nursing.

**OPTION F - BOARD OF REGISTERED NURSING REFERRAL**

Applicants for California licensure as registered nurses may be referred by the Board of Registered Nursing to complete specific areas of nursing content prior to taking the NCLEX-RN examination. The Nursing Program offers such applicants the opportunity to complete nursing preparation as specified by the Board of Registered Nursing.

**PREREQUISITES:**

A valid letter of referral from the California Board of Registered Nursing for completion of a specified area. NRS 26 and 215 or equivalents with grades of Credit or “C” or higher.

**NURSING——RN TRANSFER PROGRAM**

The following curriculum does not lead to an Associate in Arts Degree. To earn an AA degree, see Nursing in the catalog for the major requirements.

**LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University — Fullerton**

Admission requirements as follows:

Meet requirements for admission to the university as a transfer student.

- Completion of an AA degree in Nursing or its equivalent.
- Current licensure as a registered nurse in California.

Completion of one college level course in each of the following:

- A&P 200 & 201, (preferred), or A&P 150 & A&P 151, CHEM 100 or CHEM 110, or CHEM 111, MICR 200, PSYC 100, SOC 101, or ANTH 100.

Completion of one year of satisfactory work experience as a registered nurse recommended.

**California State University — Los Angeles**

- A&P 200 or A&P 150
- A&P 201 or A&P 151
- CHEM 100
- ENGL 100
- One course from ENGL 103, PHIL 202, PHIL 106 or SPCH 235
- PSYC 101
- PSYC 251
- SOC 101
- SPCH 130
- HO 151 and HO 152

**California State University — Long Beach**

The department of nursing offers two bachelor’s degrees:

- Bachelor of Science in Nursing - Basic
- Bachelor of Science in Nursing – Registered Nurse

Transfer students may only enter at the upper division (junior) level. You are considered an upper-division transfer student if you will have completed 60 or more transferable semester units or 90 transferable quarter units by the end of the prior Spring term for Fall entrance or the prior Summer term for Spring entrance. As an upper-division transfer student, you must also meet minimum CSU admission requirements by the time periods mentioned above to be considered for admission.

The Bachelor of Science in nursing programs are impacted. Please refer to the admissions website for details, http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html

**Bachelor of Science in Nursing — Basic**

- A&P 200 or A&P 150
- A&P 201 or A&P 151
- MICRO 200
- PSYC 101
- SOC 101

**Bachelors of Science in Nursing — Registered Nurse**

In order to apply for this option a student must:

- Hold a current license or be eligible for license to practice in California
- Be a graduate from an accredited Associate Degree program or evaluation of diploma program for equivalency by an Accredited Associate Degree program.
- Completion of general education for CSU or IGETC may be completed at the community college or at the university.
PHARMACY TECHNOLOGY

PHARMACY CLERK PROGRAM

The pharmacy clerk is a non-registered, technical worker who performs the minimum non-discretionary tasks as allowed by the Board of Pharmacy of the State of California, under the direct supervision of a registered pharmacist. Employment in this field requires applicants to have good vision, hearing, the ability to communicate orally and the physical ability to perform tasks required of a pharmacy clerk. A Certificate of Completion shall be awarded to the student who completes with a grade of “C” or better the following courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 45</td>
<td>Retail Products for Pharmacy Clerks</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 47</td>
<td>Pharmacy Clerk Clinical Experience</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 60</td>
<td>Pharmacy Introduction</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 60L</td>
<td>Pharmacy Skills Lab Introduction</td>
<td>1</td>
</tr>
<tr>
<td>MATH 20</td>
<td>Basic Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 62</td>
<td>Microcomputer Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>or BCOT 135</td>
<td>Typewriting Speed/Control Building</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units Required: 11

*Students who provide documented ability to type 35 wpm or more may choose to waive the keyboarding requirement.

PHARMACY TECHNICIAN

The pharmacy technician is a skilled technical health worker who performs a wide variety of non-discretionary pharmacy related tasks under the direct supervision of a registered pharmacist. Successful completion of the pharmacy technician program qualifies one for registration with the California State Board of Pharmacy. Graduates are also encouraged to complete the Pharmacy Technician Certification Exam, the nationally recognized certification exam for pharmacy technicians.

LENGTH AND KIND OF PROGRAM

General education and Pharmacy technician classes are scheduled on the college campus. Correlated clinical experiences take place in selected hospitals and community pharmacies throughout the area. This broad-based program is especially suited for those students who may later choose to pursue higher education in health care areas. Courses are taught by practicing registered pharmacists and pharmacy technicians and are offered during the day and evening.

WRITING PROFICIENCY REQUIREMENT:

Completion of ENGL 50A and ENGL 50B with grades of Credit or “C” or higher, or earning a score on the Writing Proficiency Test sufficient for placement in ENGL 52.

MATHEMATICS PROFICIENCY REQUIREMENTS:

(1) This requirement can be met by one of the following options: Earn a score on the Basic Math Readiness test sufficient for placement in a course above the level of MATH 40 or
(2) Completion of MATH 40 with a grade of Credit or “C” or higher, or
(3) For other options see your counselor.

READING PROFICIENCY REQUIREMENTS

The requirement can be met by one of the following options:
(1) Successfully complete the Reading Proficiency Test at the 12th grade level. The Reading Proficiency Test may be taken no more than once each semester.
(2) Completion of READ 54 with a grade of Credit or “C” or higher.
(3) For other options see your counselor.

HEALTH

Employment in this field requires applicants to have good vision, hearing, and the ability to communicate orally. Applicants must present evidence of physical fitness and ability to perform tasks required of a pharmacy technician. Lab, x-ray and immunization records meeting the standards of the clinical site must be completed after acceptance into the program.

EXPENSES

Students are expected to purchase a student body card. Enrollment fees, project fees, uniforms, books, and supplies will cost approximately $1,000.00. Students are responsible for their own living accommodations, uniform laundry, and transportation to selected hospitals and clinics.
ATTENDANCE AND SCHOLARSHIP

All students are expected to observe the attendance requirements of the college and of the Pharmacy Technician Program. To remain in the program, the student must maintain a "C" or higher in each required course.

CRIMINAL BACKGROUND CHECKS

Clearance of a criminal background check may be required prior to clinical placement. Students who do not clear agency requirements are not eligible for clinical placement and will, consequently, be ineligible to continue in the course. If there is any concern regarding clearance of a criminal background check, please contact the Health Occupations Division for additional information.

REQUIRED DOCUMENTATION

1. Submit proof of High School graduation or equivalent.
2. Submit an official transcript of all college work to the Admissions and Records Office and a copy to the Health Occupations Division.
3. Submit assessment test scores for English, Reading, and Math prior to enrolling in PHAR 62. If you have not taken these tests, proof of clearance by course work must appear on your college transcript. If you do not have course work or test scores to submit, apply to Cerritos College, obtain a student number, take the assessment/placement test at the Assessment Center.
4. It is advised that you make an appointment with a counselor to review test scores and college work. To make an appointment with a counselor, call (562) 860-2451, extension 2231.
5. Prior to enrolling in PHAR 90 and PHAR 95, you must obtain a valid CPR card for Basic Life Support (Course Level "C" or C.P.R. for Health Care Providers), offered through the Heart Association or the American Red Cross prior to the first clinical experience.

**The program has made every reasonable effort to determine that everything stated in the information sheet is accurate. Matters contained herein are subject to change without notice by the administration of the department for reasons related to student enrollment, level of financial support, or for any reason at the discretion of the Program. The Program further reserves the right to add, amend, or repeal any of the rules, regulations, policies, and procedures, consistent with applicable laws.

CERTIFICATE OF ACHIEVEMENT

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 56</td>
<td>Medication Calculations</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 50</td>
<td>Pharmaceutics</td>
<td>1.5</td>
</tr>
<tr>
<td>PHAR 60</td>
<td>Pharmacy Introduction</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 60L</td>
<td>Pharmacy Skills Lab Introduction</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 62</td>
<td>Pharmacy Operations I</td>
<td>.5</td>
</tr>
<tr>
<td>PHAR 63</td>
<td>Pharmacy Operations II</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 64</td>
<td>Pharmacy Operations III</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 81</td>
<td>Over-The-Counter Products</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 83</td>
<td>Pharmacy Technician Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 85</td>
<td>Pharmacy Technician Pharmacology II</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 90</td>
<td>Clinical Experience I</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 95</td>
<td>Clinical Experience II</td>
<td>5</td>
</tr>
<tr>
<td>MA 161</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>or A&amp;P 120</td>
<td>Introduction to Anatomy and Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Optional:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 73/74</td>
<td>Pharmacy Technician Occupational Work Experience</td>
<td>3-4</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 31/33

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement in Pharmacy Technician. For an A.A. Degree, a student must also take electives and general education to achieve a minimum of 60 units. See Cerritos College Graduation Requirements.

CAREER OPPORTUNITIES: Employment as a Pharmacy Technician in community or hospital pharmacy assisting registered pharmacist in the performance of assigned duties.

See Cerritos College Graduation Requirements.

PHILOSOPHY

TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION

FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
</tbody>
</table>

California State University – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 103</td>
<td>Critical and Argumentative Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

University of California – Irvine

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Introduction to Twentieth Century Philosophy</td>
<td>3</td>
</tr>
</tbody>
</table>

At least one course from each area, A-D:

A) 
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 103</td>
<td>Critical and Argumentative Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

B) 
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 230A</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 230B</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246A</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246B</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 248A</td>
<td>Masterpieces of World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 248B</td>
<td>Masterpieces of World Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

C) 
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 102</td>
<td>Political and Social History of the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>HIST 103</td>
<td>Political and Social History of the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>HIST 241</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 242</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 245</td>
<td>World Civilization from Antiquity to 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 246</td>
<td>World Civilization from 1500 to the Present</td>
<td>3</td>
</tr>
</tbody>
</table>

D) 
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 102</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

ADDITIONAL REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 202</td>
<td>Intermediate French</td>
<td>4</td>
</tr>
<tr>
<td>or GERM 202</td>
<td>Intermediate German</td>
<td>4</td>
</tr>
<tr>
<td>or JAPN 202</td>
<td>Intermediate Japanese</td>
<td>4</td>
</tr>
<tr>
<td>or SPAN 202</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
</tbody>
</table>

University of California – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 102</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 202</td>
<td>Critical Thinking and Argumentative Writing</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
</tr>
</tbody>
</table>
PHOTOGRAPHY
ASSOCIATE IN ARTS DEGREE PROGRAM

MAJOR REQUIREMENTS (26 UNITS)

DEPARTMENT REQUIREMENTS (15 UNITS)

PHOT 100 Introductory Photography 3
PHOT 102 Intermediate Photography 3
PHOT 110 Introduction to Digital Photography 3
PHOT 160 History of Photography 3
PHOT 234 Portfolio Development 3

SELECT 8 UNITS MINIMUM COURSE WORK FROM THE FOLLOWING:

PHOT 112 Intermediate Digital Photography 3
PHOT 122 Introduction to Color Photography 3
PHOT 171 Occupational Work Experience in Photography 3
PHOT 200 Advanced Photography 3
PHOT 230 Portrait Photography 3
PHOT 232 Approaches to Studio Lighting 3
PHOT 240 Experimental Photography 3
PHOT 250 Contemporary Photographic Expression 3
PHOT 252 Photography of the Landscape 3
PHOT 298 Directed Studies 1
PHOT 299 Directed Studies 2

SELECT 3 UNITS MINIMUM COURSE WORK FROM THE FOLLOWING:

ART 120 Two-Dimensional Design 3
ART 192 Photoshop/Digital Imaging 3
ART 196 Intro Design Web Graphics 3
JOUR 130 Photojournalism 3

NOTE: 35 mm camera and film are provided by each student. Laboratory fees are also required. Refer to the class schedules for specific course fees.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

A minimum of 60 units to include: (1) the above course requirements, (2) the Associate in Arts degree general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Photographer for newspapers, magazines; commercial, industrial, television advertising; scientific research; portrait studio; custom photo lab technician; medical photographic technician.

See Cerritos College Graduation Requirements.

PHOTOGRAPHY
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY

NEITHER THE CALIFORNIA STATE UNIVERSITY NOR THE UNIVERSITY OF CALIFORNIA OFFER A DEGREE IN PHOTOGRAPHY. VARIOUS PHOTOGRAPHY OPTIONS HOWEVER ARE AVAILABLE AT SOME CALIFORNIA STATE UNIVERSITY CAMPUSES.

California State University – Fullerton

Photo-Communications may be selected as a concentration in the Communications major.
(In addition to the common preparation)
JOUR 100 Intro to Mass Communication 3
JOUR 101 Begin Newswriting and Report 3

Creative Photography is an available concentration in the Art major.
PHOT 102 Intermediate Photography 3
PHOT 200 Advanced Photography 3
PHOT 240 Experimental Photography 3
ART 101 Appreciation and History 3
ART 102 Appreciation and History 3
ART 112 Life Drawing 3
ART 213 Intermediate Life Drawing 3
ART 116 Beginning Printmaking 3
ART 117 Intermediate Printmaking 3
ART 219 Advance Etching 3

California State University – Long Beach

Art Photography may be selected as an option in the Art major. See the Art major sheet for core Art major requirements.

California State University – Northridge

Photojournalism may be selected as an option in the Journalism major.

ASSOCIATE IN ARTS DEGREE:

Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

RECOMMENDED ELECTIVES: PHOT 100, 102, 122, 160, 200, 234, 240, JOUR 100, 101, and 130

CAREER OPPORTUNITIES: Photographer for newspapers; magazines; advertising; scientific research; graphic design; studio and photographic laboratories; teaching.

See Cerritos College Graduation Requirements.

PHYSICAL EDUCATION
EXERCISE SCIENCE: ATHLETIC TRAINER AIDE
CERTIFICATE OF ACHIEVEMENT

DEPARTMENT REQUIREMENTS:

A&P 120* Introduction to Human Anatomy & Physiology 4
MA 161 Medical Terminology 3
HED 110 Community First Aid and CPR 3
PE 107  Introduction to Athletic Training  3
PE 141  Fitness and Wellness  3
PE 254  Measurement and Interpretation of Fitness  3
PE 255  Programs and Principles of Conditioning  2
PE 260  Athletic Injury Assessment and Reconditioning  2
PE 261  Athletic Injury Taping, Bandaging & Immobilization  1
PE 271A  Occupational Work Experience for Athletic Training  1

*(A&P 150 & A&P 151 or A&P 200 & A&P 201 recommended for transfer students)

TOTAL CERTIFICATE UNITS  26

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements of the Certificate of Achievement in Exercise Science: Athletic Training and complete general education requirements and electives to achieve a minimum of 60 units.
See Cerritos College Graduation Requirements.
Although many of these courses are transferable, this certificate/A.A. degree is nontransferable.
Please see Counselors or the respective department chairperson for additional alternatives.

EXERCISE SCIENCE: FITNESS SPECIALIST CERTIFICATE OF ACHIEVEMENT

DEPARTMENT REQUIREMENTS:  UNITS
HED 110  Community First Aid and CPR  3
HED 200  Nutrition for Health, Fitness and Physical Conditioning  3
PE 107  Introduction to Athletic Training  3
PE 141  Fitness and Wellness  3
PE 254  Measurement and Interpretation of Fitness  3
PE 255  Programs and Principles of Conditioning  3
PE 271B  Occupational Work Experience for Fitness  1
A&P 120*  Introduction to Human Anatomy & Physiology  4
BA 100  Fundamentals of Business  3

TOTAL CERTIFICATE UNITS  26

*(A&P 150 & A&P 151 or A&P 200 & A&P 201 recommended for transfer students)

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements of the Certificate of Achievement in Exercise Science: fitness and complete general education requirements and electives to achieve a minimum of 60 units.
See Cerritos College Graduation Requirements.
Although many of these courses are transferable, this certificate/A.A. Degree is nontransferable.
Please see Counselors or respective department chairperson for additional alternatives.

PHYSICAL EDUCATION ASSOCIATE IN ARTS DEGREE
In order to qualify for an A.A. degree in Physical Education the following requirements must be met:
1) Completion of the A.A. degree general education and proficiency requirements;
2) Completion of a minimum of 60 degree applicable units;
3) Completion of at least 26 units of physical education coursework from the following:
   a. Required Core Courses  17/23 Units
   b. Required Activity Courses  6 Units
   c. Required PE Elective Courses  3 Units

See Cerritos College Graduation Requirements.

REQUIRED CORE COURSES  UNITS
PE 100  Introduction to Physical Education and Sport  3
PE 107  Introduction to Athletic Training  3
PE 141  Fitness and Wellness  3
HED 110  First Aid and CPR  3
A&P 130  Human Anatomy and Physiology  5
or A&P 200  Human Anatomy  5
and A&P 201  Human Physiology  5

REQUIRED ACTIVITY COURSES (6 UNITS)
Activity courses must include at least 1 (one) unit from each of the following 5 (five) areas, for a total of 6 (six) units.

(1) Aerobic Fitness
PE 121  Adapted Cardiovascular Exercise  1
PE 131  Walking for Fitness  1
PE 132A  Low Impact Aerobics  1.5
PE 132B  Aerobic Activities  1.5
PE 133  Step Aerobics  1.5
PE 134  Water Aerobics  1
PE 135A  Circuit Weight Training, Beginning  1
PE 135B  Circuit Weight Training, Intermediate/Advanced  2
PE 138  Yoga  1
PE 139  Pilates Conditioning  1
PE 146  Weight Management  1.5

(2) Fitness
PE 122  Adapted Strength Training  1
PE 130  Stretch and Relaxation  1
PE 135A  Circuit Weight Training, Beginning  1
PE 135B  Circuit Weight Training, Intermediate/Advanced  2
PE 138  Yoga  1
PE 139  Pilates Conditioning  1
PE 146  Weight Management  1.5

(3) Aquatics
PE 123  Adapted Swimming  1
PE 150A  Swimming, Beginning  1
PE 150B  Swimming, Intermediate/Advanced  2
PE 170  Water Polo  2
(Participation in Intercollegiate Swimming or Water Polo will satisfy this requirement)

(4) Team Activities
PE 124  Wheelchair Activities  1
PE 171A  Softball  1
PE 171B  Softball, Intermediate/Advanced  2
PE 171C  Slow-Pitch Softball  1
PE 172A  Volleyball, Beginning  1
PE 172B  Volleyball, Intermediate/Advanced  2
PE 175A  Baseball, Beginning  1
PE 175B  Baseball, Intermediate/Advanced  2
PE 176A  Beginning Basketball  1
PE 176B  Basketball, Advanced  2
PE 177  Flag Football  1
PE 178  Football, Intermediate/Advanced  2
PE 179A  Soccer, Beginning  1
PE 179B  Soccer, Intermediate/Advanced  2
(Participation in Intercollegiate Athletics excluding swimming and water polo will fulfill this requirement)
## Individual Activities

- **PE 120** Sedentary Activities for Students with Disabilities 1
- **PE 151** Wrestling 1
- **PE 153A** Backpacking, Beginning 2
- **PE 153B** Backpacking, Advanced 2
- **PE 154A** Badminton, Beginner 1
- **PE 154B** Badminton, Intermediate/Advanced 2
- **PE 155A** Bowling, Beginner 1
- **PE 155B** Bowling, Intermediate/Advanced 1
- **PE 156A** Golf, Beginner 1
- **PE 156B** Golf, Intermediate/Advanced 2
- **PE 158A** Racquetball, Beginner 1
- **PE 158B** Racquetball, Intermediate/Advanced 2
- **PE 159A** Tennis, Beginner 1
- **PE 159B** Tennis, Intermediate/Advanced 2
- **PE 160** Self Defense 1
- **PE 180** Introduction to Dance Movement 3
- **PE 181** Introduction to Dance Cultures of the World 2
- **PE 182A** Dance, Modern, Beginner 2
- **PE 182B** Dance, Modern, Intermediate 2
- **PE 186A** Beginning Ballet 2
- **PE 186B** Intermediate Ballet 2
- **PE 193** Introduction to Ballroom Dance 2
- **PE 195** Commercial Dance 2
- **PE 196** Latin Social Dance 2

## PE Elective Courses (3 Units Minimum)

- **PE 101A** Sports Officiating for Football 1
- **PE 101B** Sports Officiating for Men’s and Women’s Basketball 1
- **PE 102A** Sports Officiating for Baseball 1
- **PE 102B** Sports Officiating for Men’s and Women’s Track & Field 1
- **PE 105** Student Athlete in Society 2
- **PE 106** Women in Sports 3
- **PE 125** Water Safety Instructor (WSI) 2
- **PE 191** History of Dance 3
- **PE 192** Dance and Digital Technology 3
- **PE 253** Sports Psychology 3
- **PE 254** Measurement and Interpretation of Fitness 3
- **PE 255** Programs and Principles of Conditioning 3
- **PE 260** Athletic Injury Assessment and Reconditioning 2
- **PE 261** Athletic Injury Taping, Bandaging & Immobilization 1
- **HED 200** Nutrition for Health, Fitness and Physical Conditioning 3

## Recommended General Education Electives

- **HED 100** Contemporary Health Problems 3
- **PSYC 101** General Introduction to Psychology 3
- **SOC 101** Introductory Sociology Principles 3

## Physical Education Transfer Program

### Common Lower Division Preparation

**For the California State University**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HED 110 Community First Aid and CPR</td>
<td>3</td>
</tr>
<tr>
<td>PE 100 Introduction to Physical Education and Sport</td>
<td>2</td>
</tr>
</tbody>
</table>

### Lower Division Major Requirements

**For Specific Transfer Institutions**

## California State University – Dominguez Hills

- **A&P 130** Human Anatomy and Physiology 5
- **A&P 150** Introduction to Anatomy 4
- **A&P 151** Introduction to Physiology 4
- **A&P 200** Human Anatomy and Physiology 5
- **A&P 201** Human Anatomy and Physiology 5

See a counselor for additional option requirements. Options available are Athletic Training Pre-professional, Athletic Training certificate, Dance Concentration, Fitness Director and Teaching.

## California State University – Fullerton

**Kinesiology Major**

Select six (6) units from the following:

- **A&P 120** Introduction to Human Anatomy and Physiology 4

## California State University – Long Beach

**Kinesiology Major**

- **A&P 200** Human Anatomy 5
- **A&P 150** Introduction to Anatomy 4
- **A&P 201** Human Anatomy and Physiology 5
- **A&P 151** Introduction to Physiology 4
- **PSY 101** General Introductory Psychology 3
- **PE 156B** Golf: Intermediate/Advance 2
- **PE 172B** Volleyball, Intermediate/Advanced 2
- **PE 179B** Soccer, Intermediate/Advanced 2
- **PE 125** Water Safety Instructor 2

All one unit P.E. activity courses will be accepted for this major. Options available: Adapted Physical Education, Elementary School Physical Education, Secondary School Physical Education, Bachelor of Science in Kinesiology, Exercise Science.

## California State University – Northridge

**Kinesiology Major**

- **BIOL 120** Introduction to Biological Science 4
- **A&P 200** Human Anatomy 5
- **A&P 201** Human Physiology 5
- **ADDITIONAL REQUIREMENTS:**
  - Exercise Science Option
    - **CHEM 100** Elementary Chemistry 4
    - **CHEM 111** General Chemistry 5
    - **PHYS 101** General Physics 4
  - Athletic Training Option
    - **HO 152** Normal and Therapeutic Nutrition 3
    - **MATH 114** College Algebra 4
    - **PHYS 101** General Physics 4
    - **PSYC 101** General Intro to Psychology 3

Complete above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

**Career Opportunities:** Coach, fitness director YMCA and YWCA, outdoor education programs, instructor in private and public camps, rehabilitation centers, teacher/athletic trainer, sports medicine clinics, sports education, community, county, state recreation departments, credential teacher (elementary or secondary).

See Cerritos College Graduation Requirements.

See State University General Education List.
**EXERCISE SCIENCE**  
**ASSOCIATE IN ARTS DEGREE**

**REQUIRED COURSES**

**CORE REQUIREMENTS (19 UNITS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HED 110</td>
<td>3</td>
</tr>
<tr>
<td>PE 107</td>
<td>3</td>
</tr>
<tr>
<td>PE 141</td>
<td>3</td>
</tr>
<tr>
<td>PE 254</td>
<td>3</td>
</tr>
<tr>
<td>PE 255</td>
<td>3</td>
</tr>
<tr>
<td>PE 271</td>
<td>1</td>
</tr>
<tr>
<td>AP 120*</td>
<td>4</td>
</tr>
</tbody>
</table>

*(AP 150 & AP 151 or AP 200 & AP 201 recommended for transfer students)*

Completion of all courses (7 units) in either the Fitness Emphasis or the Athletic Training Emphasis as listed below:

**Fitness Emphasis**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 100</td>
<td>3</td>
</tr>
<tr>
<td>HED 200</td>
<td>3</td>
</tr>
<tr>
<td>PE 271B</td>
<td>1</td>
</tr>
</tbody>
</table>

**Athletic Training Emphasis**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA161</td>
<td>3</td>
</tr>
<tr>
<td>PE 260</td>
<td>2</td>
</tr>
<tr>
<td>PE 261</td>
<td>1</td>
</tr>
<tr>
<td>PE 271A</td>
<td>1</td>
</tr>
</tbody>
</table>

At least two physical education activity courses from department approved list for a total of 3 units.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete (1) core requirement, (2) all courses in the Fitness Emphasis or the Athletic training emphasis (3) two physical education activity courses (4) the Associate in Arts Degree general education requirement.

**PHYSICAL THERAPIST ASSISTANT PROGRAM**

**ASSOCIATE IN ARTS DEGREE**

The Physical Therapist Assistant is a skilled technical health worker who performs physical therapy interventions under the direction of a Physical Therapist. This program is accredited by the Commission on Accreditation in Physical Therapy Education - American Physical Therapy Association. Successful completion of the Physical Therapist Assistant Program and Associate in Arts Degree qualifies students to take the State of California Licensing Examination for Physical Therapist Assistants.

**LENGTH AND KIND OF PROGRAM**

The program is four semesters in length. General education and Physical Therapist Assistant classes are scheduled on the college campus. Correlated clinical experiences begin the second semester and continue throughout the program. These experiences take place at selected hospitals and clinics in Los Angeles, Orange, Riverside, and San Bernardino Counties.

**ADMISSION PROCEDURES AND REQUIREMENTS**

1. Academic Requirements
   a. Acceptable scores on College Placement Tests for English and Mathematics and Reading clearance or deficiencies removed
   b. A&P 150, A&P 151 with grades of “C” or higher
   c. All deficiencies in academic requirements must be removed. An overall Grade Point Average of 2.0 must be attained prior to admission to the Physical Therapist Assistant Program, and a grade of “C” or higher must be attained for each general education and required course.

   Applicants who have not completed 1b and 1c will not be considered for admission.

2. Health
   a. Applicants must present evidence of physical fitness and ability to perform tasks required of a Physical Therapist Assistant.

   Lab, x-rays and immunization records meeting hospital standards must be completed after acceptance into the program.

**SELECTION PROCEDURES**

1. Academic Evaluation
   a. All required documents, including progress reports, transcripts, and work verification from Physical Therapist employer must be in the Health Occupations Division Office by April 15.

   b. No student whose college grade point average is below 2.0, or who has not cleared English, Math, or Reading deficiencies can be considered. These are considered minimum standards of academic preparation.

   c. Additional consideration will be given for work experience in the field of physical therapy or related areas, and for students who have completed additional medical or science related classes.

**EXPENSES**

Students are expected to purchase a student body card. Enrollment fees, project fees, uniforms, books, and supplies which will cost approximately $1200.

Students are responsible for their own living accommodations, uniform laundry, and transportation to selected hospitals and clinics.

**ATTENDANCE AND SCHOLARSHIP**

All students are expected to observe the attendance requirements of the College and of the Physical Therapist Assistant Program. To remain in the Program, the student must maintain a “C” or higher in each required and general education course.

Lab coats are required in all hospital lab classes (PTA 126L, 236L, 246L).

**CRIMINAL BACKGROUND CHECK**

Clinical placements are a mandatory component of the curriculum and may require clearance of a criminal background check. Students who do not clear agency requirements are not eligible for clinical placement and will, consequently, be ineligible to continue in the program. If there is any concern regarding clearance of a criminal background check, please contact the Health Occupations Division for additional information.

**PROCEDURE FOR APPLICATION**

*(To be completed in order as listed)*

1. Complete application to the program. This can be obtained in either the Health Occupations Division (562) 860-2451, Ext. 2550, or Counseling Office, Ext. 2231. The application must be returned by April 15.
2. Submit two official transcripts of all college work. Submit one copy to the Health Occupations Division and one copy to the Admissions and Records Office.

3. Submit assessment test scores for English, Reading, and Math with your application by April 15. If you have not taken these tests, proof of clearance by course work must appear on your college transcript. If you do not have course work or test scores to submit, apply to Cerritos College, obtain a student number, take the assessment/placement test at the Assessment Center and record your test date on your program application by April 15. Students are accepted only in the Fall semester.

4. It is advised that you make an appointment with a counselor to review test scores and college work. To make an appointment with a counselor, call (562) 860-2451, Ext. 2231.

5. As soon as all of the above material is received and reviewed, you will be notified of acceptance or non-acceptance after May 1. If you are completing admission requirements during the spring session, a “work-in-progress” report must be submitted to the Health Occupations Division at the end of the first four weeks of the course.

6. If you are accepted into the Physical Therapist Assistant Program, you must present a valid CPR card for the Healthcare Provider offered through the Heart Association prior to the first hospital experience (PTA 126). Card must be valid throughout the program.

ASSOCIATE IN ARTS DEGREE

A total of 69 units including the following requirements must be completed to qualify for the A.A. Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 150 Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>A&amp;P 151 Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>ENG 100 Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>MA 161 Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101 General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 100 Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>OR SPCH 130 Fundamentals of Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Additional General Education Requirements</td>
<td>6 units</td>
</tr>
</tbody>
</table>

FIRST YEAR

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 110 Introduction to Physical Therapy</td>
<td>4</td>
</tr>
<tr>
<td>PTA 120 Kinesiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 125 Pathology</td>
<td>3</td>
</tr>
<tr>
<td>PTA 126 Clinical Practicum I</td>
<td>4</td>
</tr>
<tr>
<td>PTA 127 Soft Tissue Interventions</td>
<td>2</td>
</tr>
<tr>
<td>PTA 128 Physical Therapy Aspects of Growth</td>
<td>3</td>
</tr>
</tbody>
</table>

Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 255 Neurology</td>
<td>3</td>
</tr>
</tbody>
</table>

Summer Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 129 Physical Therapy Aspects of Aging and Integumentary Management</td>
<td>1.5</td>
</tr>
</tbody>
</table>

SECOND YEAR

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 230 Therapeutic Exercise</td>
<td>4</td>
</tr>
<tr>
<td>PTA 233 Prosthetics and Orthotics for Allied Health Professionals</td>
<td>2</td>
</tr>
<tr>
<td>PTA 236 Clinical Practicum II</td>
<td>4</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 240 Activities of Daily Living</td>
<td>2</td>
</tr>
<tr>
<td>PTA 245 Advanced Modalities</td>
<td>3</td>
</tr>
<tr>
<td>PTA 246 Clinical Affiliation</td>
<td>4</td>
</tr>
</tbody>
</table>

See Cerritos College Graduation Requirements.

PHYSICS

TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 100 Elementary Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101 General Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 201 Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202 Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203 Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

California State University - Dominguez Hills (General Physics Option)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CIS 171 Visual Basic Programming</td>
<td>3</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190 Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

California State University - Fullerton

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190 Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

California State University - Long Beach

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 120 Introduction to Biological Science</td>
<td>4</td>
</tr>
<tr>
<td>OR BIOL 201 Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190 Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

California State University - Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 103 Critical Thinking and Argumentative Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190 Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

California State Polytechnic University - Pomona

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CIS 178 Programming in Fortran</td>
<td>3</td>
</tr>
<tr>
<td>OR CIS 180 Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190 Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 240 Calculus and Differential Equations</td>
<td>4</td>
</tr>
</tbody>
</table>

University of California – Irvine

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 180 Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>OR CIS 280 Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
</tbody>
</table>
Curricula, Requirements for Majors, Certificates and Transfer Programs

MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
MATH 220 Analytic Geometry and Calculus III 4
MATH 240 Calculus and Differential Equations 4

Recommended Courses:
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5
See counselor for specific concentration requirements.

University of California - Los Angeles
CHEM 111 General Chemistry 5
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
MATH 220 Analytic Geometry and Calculus III 4
MATH 240 Calculus and Differential Equations 4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include (1) the common lower division requirements and (2) the Associate in Arts Degree general education requirements.

CAREER OPPORTUNITIES: Physicists find rewarding careers in teaching Physical Sciences, medicine, and industrial and governmental scientific endeavors.

See Cerritos College Graduation Requirements.
See California State University General Education List.

PLASTICS MANUFACTURING TECHNOLOGY (PMT) SPECIALTY REQUIREMENTS
In order to obtain a Plastics Specialty, the student is encouraged to complete the required units for the Plastics Manufacturing Technology degree. The five to seven units for the specialty may come from the units completed toward the degree or from additional courses outlined below. Students with previous coursework may also be considered for certificates upon providing transcripts for review, and consent of the department.

Plastics Manufacturing Technology Specialty
PMT 63L Specialty Plastics Lab .5
PMT 68 Plastics Materials & Processes 2.5
PMT 100 Plastics I 2.5
Total Units 5.5

Inspection and Testing Specialty
PMT 63L Specialty Plastics Lab .5
PMT 100 Plastics I 2.5
MET 120 Nondestructive Testing 3
Total Units 6

Injection Molding Specialty
PMT 59 Injection Molding I 2.5
PMT 63L Specialty Plastics Lab .5
PMT 100 Plastics I 2.5
Total Units 5.5

Moldmaking Specialty
PMT 59 Injection Molding I 2.5
PMT 63L Specialty Plastics Lab .5
PMT 65 Moldmaking 3
Total Units 6

Fiberglass Specialty
PMT 61 Fiberglass I 2.5
PMT 63L Specialty Plastics Lab .5
PMT 67 Fiberglass II 2.5
Total Units 5.5

Composites Specialty
PMT 61 Fiberglass I 2.5
PMT 67 Fiberglass II 2.5
PMT 70 Composites Technology 2.5
Total Units 7.5

Fiberglass/Composite Repair Specialty
PMT 53 Composite Repair 3
PMT 61 Fiberglass I 2.5
PMT 67 Fiberglass II 2.5
Total Units 8

Tooling Specialty
PMT 63L Specialty Plastics Lab .5
PMT 72 Tooling for Plastics 2.5
PMT 221 Modelmaking 2.5
Total Units 5.5

PLASTICS/COMPOSITES MANUFACTURING TECHNOLOGY CERTIFICATE OF ACHIEVEMENT PROGRAM

CORE
PMT 100 Plastics I 2.5
TM 50 Technical Mathematics 3
BCOM 147 Business Communications 3
BCOM 148 Effective Business Presentations 3
Total Units 8

COMPOSITES MANUFACTURING OPTION
PMT 61 Fiberglass I 2.5
PMT 63L Specialty Plastics Lab .5
PMT 67 Fiberglass II 2.5
PMT 68 Plastics Materials and Processes 2.5
PMT 70 Composites Technology 2.5
ENGT 16 Blueprint Reading for Machine Trades 2
Total Units (including CORE) 24

COMPOSITE INSPECTION OPTION
PMT 61 Fiberglass I 2.5
PMT 63L Specialty Plastics Lab .5
PMT 67 Fiberglass II 2.5
PMT 70 Composites Technology 2.5
MET 68 Plastics Materials and Processes 2.5
MET 120 Nondestructive Testing 3
Total Units (including CORE) 25

PLASTIC/COMPOSITE TOOL DESIGN OPTION
PMT 65 Moldmaking I 3
PMT 72 Tooling for Plastics 2.5
ENGT 138 Fundamentals of Computer Aided Drafting 4
ENGT 258 Design and Production Technology with AutoCad 4
ENGR 123 Descriptive Geometry 3
Total Units (including CORE) 28
PLASTICS MANUFACTURING OPTION

PMT 4  Plastics III  2.5
PMT 59  Injection Molding I  2.5
PMT 60  Extrusion  3
PMT 61  Fiberglass I  2.5
PMT 63L  Specialty Plastics Lab  .5
PMT 64  Plastics II  2.5
PMT 66  Hydraulics and Pneumatics  3
PMT 68  Plastics Materials and Processes  2.5
PMT 71  Plastics IV  2.5
PMT 72  Tooling for Plastics  2.5

Total Units (including CORE)  33

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include: (1) the above requirements for a specific Certificate of Achievement, (2) ENGT 16, (for Composite Manufacturing, Composite Inspection and Plastics Manufacturing Options Only), (3) the Associate of Arts Degree general education requirements, and (4) electives as needed.

RECOMMENDED ELECTIVES: PMT 98-99 (Directed Studies)

CAREER OPPORTUNITIES: Upon completion of the program, a student is prepared to work in areas of injection, compression and extrusion molding, mold laminating, plastic mold design and fabrication, as well as testing equipment set up, maintenance, and tooling.

See Cerritos College Graduation Requirements.

POLITICAL SCIENCE

TRANSFER PROGRAM

LOWER DIVISION MAJOR PREPARATION

FOR SPECIFIC INSTITUTIONS  UNITS

California State University – Fullerton
POL 101  American Political Institutions  3
or POL 201  Introduction to Political Science and American Government  (3)

CSUF also requires a lower division study of politics course not offered at Cerritos College.

California State University – Long Beach
POL 101  American Political Institutions  3

California State University – Los Angeles
POL 101  American Political Institutions  3
or POL 201  Introduction to Political Science and American Government  (3)
POL 220  Comparative Government  3

PRELEGAL OPTION:

ECON 101  U.S. and Global Economy  3
or ECON 201  Principles of Macroeconomics  (3)
or ECON 202  Principles of Microeconomics  (3)

UCR also requires a lower division political ideologies course not offered at Cerritos College. In addition to the traditional Political Science major, UCR offers Political Science majors with emphases in Administrative Studies, International Affairs, Law and Society and Public Service. See a counselor for more information on appropriate courses.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) the common lower division preparation plus other courses selected in consultation with a counselor to provide for the 18 unit minimum, (2) the Associate in Arts degree general education requirements, and (3) electives as needed for a total of at least 60 units.

CAREER OPPORTUNITIES: Diversified positions in government at the local, state, and federal levels, military, Foreign Service, private business and industry, upper division work leads into advanced degrees in law, journalism, public administration, international relations.

See Cerritos College Graduation Requirements.

PRE-CHIROPRACTIC

CAREER PATHWAY

The following curriculum does not lead to an Associate in Arts Degree in Pre-Chiropractic. However students could fulfill requirements for a Natural Sciences Degree by completing a minimum of 18 units including 2 Biological Sciences, 2 Physical Sciences and a math course beyond Intermediate Algebra.

Admission to most chiropractic colleges is based primarily on the candidates’ academic achievement in a college program. Each prospective
candidate must have completed coursework, which could transfer to an accredited four-year college. All courses considered for acceptance must have been obtained at an institution or institutions accredited by a nationally recognized agency.

**COMMON COURSE REQUIREMENTS**
**FOR MOST CHIROPRACTIC SCHOOLS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory</td>
<td>3</td>
</tr>
</tbody>
</table>

**ADDITIONAL REQUIREMENTS FOR SPECIFIC INSTITUTIONS:**

**Cleveland Chiropractic College of Los Angeles**

www.clevelandchiropractic.edu

Applicants must have completed a minimum of 90 semester units. A minimum of 48 semester units must be the specified science and general education requirements. Students who hold a baccalaureate degree in a health science discipline with a grade point average of 2.50, or who hold a non-health science baccalaureate degree with an earned grade point average of at least 3.25 receive preference for admission.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>Additional Social Sciences and or Humanities</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**Southern California University of Health and Sciences**

Formerly Los Angeles College of Chiropractic

www.scuhs.edu

Applicants must have completed a minimum of 90 semester units. A baccalaureate degree is preferred, although not required. A grade of “C” or higher in each prerequisite course. Applicants must have an overall grade point average (GPA) of 2.50 or higher. All courses must qualify as transferable to a Baccalaureate program.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>or BIOL 200</td>
<td>Principles of Biology</td>
<td>(5)</td>
</tr>
<tr>
<td>and BIOL 201</td>
<td>Principles of Biology</td>
<td>(5)</td>
</tr>
<tr>
<td>or MICRO 200</td>
<td>Principles of Microbiology</td>
<td>(5)</td>
</tr>
<tr>
<td>and ZOOL 120</td>
<td>Introduction to Animal Biology</td>
<td>(4)</td>
</tr>
<tr>
<td>SPCH 100</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>Additional Social Sciences, Fine Arts and Humanities</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Spanish language classes are strongly recommended and can apply towards humanities.

**PRE-DENTAL**

**CAREER PATHWAY**

The following curriculum does not lead to an Associate in Arts Degree. However students could fulfill requirements for a Natural Sciences Degree by completing 18 units including 2 Biological Sciences, 2 Physical Sciences and a math course beyond Intermediate Algebra.

Admission to most schools of dentistry is based primarily on the candidates' academic achievement in a college program and performance in the Dental Admissions Test (DAT). Because most of the applicants being admitted to dental schools possess a bachelor's degree, students are advised to integrate the dental school requirements into a program that will lead to a bachelor's degree in a major of their choice.

**COMMON COURSE REQUIREMENTS**
**FOR MOST DENTAL SCHOOLS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 201</td>
<td>Engineering Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>or PHYS 202</td>
<td>Engineering Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>required by many dental schools.</td>
</tr>
</tbody>
</table>

**MATHEMATICS:** The amount of mathematics beyond trigonometry needed will be determined by the major course of study the student elects to pursue.

**RECOMMENDED ELECTIVES COURSEWORK:** Anatomy/Physiology/ Human Biology, Botany, Microbiology, Histology, Biochemistry, Genetics, Embryology, Cellular & Molecular Biology, College Algebra/Calculus/Statistics, Business Management, Accounting/ Economics, Technical Writing Speech, Sociology/Anthropology, Foreign Language and Ceramics/Sculpture.

For information about specific dental school requirements, students are encouraged to consult "Admission Requirements of American Dental Schools," a catalog available from the American Association of Dental Schools, 1625 Massachusetts Ave., N.W., Washington, D.C. 20036 (Attn: Publications Assistant) or order from their website: www.aads.org.

For accurate programming and more detailed information concerning the California schools of dentistry, look up the dental school website:

Loma Linda University
www.llu.edu/llu.dentistry
University of California, Los Angeles
www.dent.ucla.edu
University of California, San Francisco
http://dentistry.ucsf.edu/
University of the Pacific, San Francisco Campus
www.dental.uop.edu
University of Southern California
www.usc.edu/hsc/dental

THE REQUIREMENTS FOR DENTAL SCHOOLS ARE SUBJECT TO CHANGE WITHOUT NOTICE.
CAREER OPPORTUNITIES: Employment of dentists is expected to grow more slowly than the average for all occupations through 2010. Although employment growth will provide some job opportunities, most jobs will result from the need to replace the large number of dentists projected to retire. Job prospects should be good if the number of dental school graduates does not grow significantly, thus keeping the supply of newly qualified dentists near current levels. The dental profession offers a variety of career options — General Dentistry or one of eight recognized specialties: Dental Public Health, Endodontics, Oral Pathology, Oral Surgery, Orthodontics, Pedodontics, Periodontics and Prosthodontics.

PRE-MEDICAL

CAREER PATHWAY

The following curriculum does not lead to an Associate in Arts Pre-Medical Degree. However, students could fulfill requirements for a Natural Sciences Degree by completing 18 units of science and math coursework to include a minimum of 2 Biological Sciences, 2 Physical Sciences and a math course beyond Intermediate Algebra.

Admission to medical school is highly competitive. Admittance is usually based primarily on the candidate's academic achievement in a college program and performance on the Medical College Admission Test (MCAT). Educational philosophies and goals, specific undergraduate course requirements, academic commitment beyond required course work, honors, extracurricular activities, leadership, application, essay, research, clinical experience, community service, volunteerism, and other qualifications for admission vary among the nation's medical schools. However, they all stress the importance of a strong foundation in the natural sciences (biology, chemistry and physics), highly developed competence in English communication skills, both written and spoken; capacity for quantitative thinking, represented by mastery of mathematics, and the scientific method; a foundation for an ever-increasing insight into human behavior, thought and aspiration, through study of man and his society, as revealed by a breadth of social sciences, fine arts and humanities. Knowledge of a modern foreign language, specifically Spanish is strongly recommended. Computer literacy is now very necessary for almost all medical schools. Many schools recommend computer science courses and require entering students to have a computer.

Medical schools do not require you to major in a particular field. It is possible to major in any one of a large number of disciplines, integrating the course requirements for medical school. In choosing an undergraduate major the student should give careful consideration to select a major area of study that interests them and that will provide a foundation necessary for the pursuit of an alternative career, if necessary. “Pre-Med” is not a major at the University for an Undergraduate Degree. While many successful applicants major in one of the natural sciences, a science major is NOT required for admission to medical school.

COMMON COURSE REQUIREMENTS

FOR MOST MEDICAL SCHOOLS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 202</td>
<td>Molecular Biology/Genetics (highly recommended)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis (highly recommended)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition &amp; Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 201</td>
<td>Engineering Physics</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Community college pre-med students who plan to transfer to a university need to complete the general education required of the transfer institution, complete the requirements of the undergraduate major and may complete the courses required by the medical school.

MATHEMATICS: Trends in medical education require the medical student to be adequately trained in mathematics. Almost all schools recommend one year of mathematics. Since calculus is recommended in several medical schools, and in some instances required, it is advantageous to complete one year of calculus or at least one semester of calculus. The second semester course may be math statistics or computer science, depending on the specific medical school requirement. Your undergraduate major will help further define your choice of mathematics requirements.

ELECTIVES: Additional science course work in biochemistry, cellular biology, genetics, molecular biology, quantitative analysis chemistry and upper division biological science courses is considered part of the academic commitment beyond the minimum required course work. Spanish is strongly recommended and computer literacy is mandatory.

For more information concerning the above listed requirements at individual schools look up the specific medical school website. The following are ten from a multitude of medical school websites:

Harvard Medical School  
www.hms.harvard.edu

Johns Hopkins School of Medicine  
www.hopkinsmedicine.org

Loma Linda University School of Medicine  
www.llu.edu/llu/medicine

Stanford University School of Medicine  
www.med.stanford.edu

U.C. Davis School of Medicine  
www-med.ucdavis.edu

U.C. Irvine College of Medicine  
www.meduci.edu

U.C. Los Angeles Geffen School of Medicine  
www.medstudent.ucla.edu

U.C. San Diego School of Medicine  
http://medicine.ucsd.edu

U.C. San Francisco School of Medicine  
www.som.ucsf.edu

U.S.C. Keck School of Medicine  
www.usc.edu/schools/medicine

For further programming and more detailed information about specific medical school programs and requirements you are encouraged to consult The Medical School Admission Requirements (MSAR), published annually by the Association of American Medical Colleges. It is an excellent resource book to help students approach their goals realistically. Each medical school's specific requirements are detailed in the MSAR. Copies may be purchased via the Association of American Medical Colleges (AAMC) web site: www.aamc.org. Another recommended web site you may want to consider is The Princeton Online Review (www.review.com/medical/) which provides comprehensive information for researching the complexities of medical school admissions.

THE REQUIREMENTS FOR MEDICAL SCHOOL ARE SUBJECT TO CHANGE WITHOUT NOTICE.
CAREER OPPORTUNITIES: Employment of physicians and surgeons will grow about as fast as the average for all occupations through the year 2010 due to the continued expansion of health care industries. The growing and aging population will drive overall growth in the demand for physician services. Future physicians may be more likely to work fewer hours, retire earlier, have lower earnings, or need to practice in underserved areas. Opportunities should be very good in rural and low-income areas, because some physicians find these areas unattractive due to lower earnings potential. Unlike their predecessors, newly trained physicians face radically different choices of where and how to practice. New physicians are much less likely to enter solo practice and more likely to take salaried jobs in group medical practices, clinics and integrated healthcare systems.

PRE-OPTOMETRY

CAREER PATHWAY

The following curriculum does not lead to an Associate in Arts Pre-Optometry Degree. However, students could fulfill requirements for a Natural Sciences Degree by completing 18 units of science and math coursework to include a minimum of 2 Biological Sciences, 2 Physical Sciences and a math course beyond Intermediate Algebra.

Admission to school of optometry offering the Doctor of Optometry is very competitive. College grades (GPA) and the Optometry Admission Test (OAT) scores are used in preliminary screening. The OAT is administered in October and February and is usually taken in the fall of your junior year. It is now being offered as a computerized test at Prometric Testing Centers, www.2test.org. The OAT tests the following: biology, chemistry, organic chemistry, mathematical ability, physics, writing and reading comprehension. The test bulletin describes the test in detail, application procedures, and test dates. A copy of this bulletin can be obtained by writing to the Optometry Admission Testing Program, 211 E. Chicago Ave., Chicago, IL. 60611. Finally, a volunteer experience with an optometrist is highly appropriate in your preparation for optometry school. There must be at least two years between the grade point average is extremely important. This last academic year, the grade point average was 3.75 – 4.00. The average GPA of the Ninety-eight students admitted was 3.45 G.P.A. The OAT scores ranged from 325 - 348.

ADDITIONAL SOURCES OF INFORMATION:

Another booklet of interest to applicants is "Optometry: A Career with Vision", giving descriptions and comparisons of individual school programs, entering class profiles, costs, etc. This booklet may be obtained at no cost, by writing the American Optometric Association, 243 N. Lindbergh Blvd., St. Louis, MO 63141. Because admission has become increasingly more difficult, having completed the equivalent of a bachelor's degree is now required in California Schools of Optometry. The bachelor's degree may be in any major of the student's choice. Another valuable source of information is the Association of Schools and Colleges of Optometry, http://www.opted.org

COMMON SCHOOL OF OPTOMETRY

COURSE REQUIREMENTS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition &amp; Literature</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Mathematical Statistics</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>MICR 200</td>
<td>Principles &amp; Applications of Microbiology</td>
</tr>
</tbody>
</table>

ADDITIONAL REQUIREMENTS FOR SPECIFIC SCHOOLS OF OPTOMETRY:

Southern California College of Optometry — Fullerton
www.scco.edu

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 150</td>
<td>Personal &amp; Social Adjustment</td>
</tr>
<tr>
<td>or PSYC 251</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>or PSYC 261</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>or PSYC 271</td>
<td>Abnormal Psychology</td>
</tr>
</tbody>
</table>

Besides the bachelor’s degree and the Optometry Admission Test results, all applications must submit three letters of recommendation from non-relatives. Your work within the community, student government, or other service organizations is considered to be important and should be included in your application. Volunteer experience with an optometrist is highly recommended in your preparation for optometry school. For the academic year Fall 2005 /Spring 2006, ninety-eight students were admitted from an applicant pool of three hundred and ninety-five. The average G.P.A. of the Ninety-eight students admitted was 3.45 G.P.A. The OAT scores ranged from 325 - 348.

University of California — Berkeley
http://optometry.berkeley.edu/admissions

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry</td>
</tr>
</tbody>
</table>

The following Cerritos College coursework is recommended to prepare students for required upper division equivalent science coursework: A&P 200, Human Anatomy, A&P201, Human Physiology, BIOL 202, Molecular Biology/Genetics, and MICR 200, Applications of Microbiology. The minimum of a bachelor's degree and its equivalent is now required for admission to UCBSO. Besides the additional science classes, the grade point average is extremely important. This last academic year, Fall 2005/Spring 2006 there were 213 applicants, of which sixty students were admitted with an average G.P.A. of 3.54 – 4.00. The average OAT score was 354 in all subjects. The range of OAT lowest scores were 300 and the high score were 400. In addition to the academic requirements, professional letters of recommendation are critical to the U.C. Berkeley School of Optometry application process.

THE REQUIREMENTS FOR SCHOOLS OF OPTOMETRY ARE SUBJECT TO CHANGE WITHOUT NOTICE.

CAREER OPPORTUNITIES: An optometrist or Doctor of Optometry (O.D.) are primary health care providers who are specifically trained and state licensed to examine, diagnose, manage, and treat conditions and diseases of the human eye and visual system. They prescribe treatment such as corrective lenses, contact lenses or vision therapy. They may practice as independent practitioners, in a group practice, a health clinic or hospital. Job opportunities for the employment of optometrists is expected to grow about as fast as the average for all occupations
through 2010 in response to the vision care needs of a growing and aging population. Employment of optometrists would grow more rapidly were it not for anticipated productivity gains that will allow each optometrist to see more patients. These expected gains stem from greater use of optometry assistants and other support personnel, who will reduce the amount of time optometrists need with each patient. Also, new surgical procedures using lasers are available that can correct some visions problems, but they remain expansive. Optometrists will still be needed to perform pre-operative and post-operative care for laser surgery.

**PRE-PHARMACY CAREER PATHWAY**

The following curriculum does not lead to an Associate in Arts Pre-Pharmacy Degree. However, students could fulfill requirements for a Natural Sciences Degree by completing 18 units of science and math coursework to include a minimum of 2 Biological Sciences, 2 Physical Sciences and a math course beyond Intermediate Algebra.

Admission to schools of pharmacy is highly competitive. Schools of Pharmacy offering the Doctor of Pharmacy generally require the completion of a minimum of 60 semester units of pre-pharmacy coursework. Applicants who have received a baccalaureate degree will be considered more favorably than applicants who have fulfilled only minimum requirements. A solid understanding of the fundamental sciences is essential for the study of the pharmaceutical and biochemical sciences. A discipline in the natural sciences is often the popular major selected.

**COMMON COURSE REQUIREMENTS FOR MOST PHARMACY SCHOOLS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition &amp; Literature</td>
<td>3</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

**ADDITIONAL REQUIREMENTS FOR SPECIFIC SCHOOLS OF OPTOMETRY:**

Loma Linda University – School of Pharmacy
**www.llu.edu/llu/sp**

Preferably, applicants will have successfully completed a baccalaureate degree in chemistry, biology, physics, or a related scientific field. The minimum requirement for acceptance without a BS degree is completion of the 72 semester units of a pre-pharmacy program of study. An introductory computer class (e.g., proficiency in a word processing program, spreadsheet, and Power Point; ability to send and receive emails with attachments and ability to search and retrieve information from the World Wide Web) and a speech communication class are required along with the following general education:

- A & P 200 Human Anatomy (as of entry 2006) | 5 units
- CIS 101 Introduction to Computer Information Systems | 3 units
- PHYS 101 General Physics | 4 units
- PHYS 102 General Physics | 4 units
- SPCH 100 Fundamentals of Oral Communication | 3 units
- Humanities | 12 units
  - Fine Arts, literature, philosophy, religion, ethics, foreign language, preferably Spanish, cultural diversity, performing arts, visual arts history or civilization | 12 units
  - Social Sciences/Behavioral Sciences | 12 units

Include one semester of economics and one semester of psychology. The remaining units can be from sociology, anthropology, political science, geography or cultural diversity.

University of California, San Diego – School of Pharmacy
**www.pharmacy.ucsd.edu**

It is strongly recommended that students complete the requirements for a bachelor's degree. The absolute, minimum requirement is 63 semester units taken at an accredited college or university in the United States and completion of the prerequisites for this school. Students who have only completed the minimum coursework and who do not obtain a bachelor's degree may be at a competitive disadvantage in the application process. Applicants who have not earned a bachelor's degree prior to the start of classes in the Fall, will only be considered if they have exceptional academic performance and evidence of outstanding leadership potential. The Admissions Committee selects applicants for matriculation who have demonstrated the personal qualities of intelligence, maturity, integrity, dedication to the ideal of service to society, and who are best suited for meeting the educational goals of the School. The ability to express oneself clearly in both oral and written English is essential. In addition to intellectual and academic competence, the Admissions Committee considers communication skills, demonstrated leadership ability, community service and health care related experience. There were 1,058 applications received. Number of applicants invited to interview was 229 of which 100% had a bachelor's degree. Sixty students were admitted to the graduating class of 2009. The average overall G.P.A. of the students admitted was 3.67.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>HUMANITIES AND FINE ARTS: any two additional courses</td>
<td>3-3</td>
<td></td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 100</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 130</td>
<td>Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>SOCIAL SCIENCES: Any two additional courses</td>
<td>3-3</td>
<td></td>
</tr>
</tbody>
</table>

Proficiency in a foreign language such as Spanish is considered highly desirable. It is also strongly recommended that students take upper division courses in biochemistry, physiology and cellular and molecular biology. These courses will better prepare the first year UCSD Pharmacy student.

University of California, San Francisco – School of Pharmacy
**http://pharmacy.ucsf.edu**

The minimum requirement is 62 semester units. Although this is the absolute minimum requirement, about 96% of the students accepted to U.C.S.F. PharmD program have completed a bachelor's degree – usually in biology, biochemistry, or chemistry. The average grade point average of all accepted students is about 3.50. Each year, less than about 1.6% of admitted students enter directly from a California Community College. Last year U.C.S.F. PharmD program accepted 122 students from 1,200 applicants.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
</tbody>
</table>
University of Pacific
www.pacific.edu/pharmacy

Although a bachelor's degree is not required, a degree can make an applicant more competitive, in recent years a strong majority of the successful applicants have had degrees. There is no absolute G.P.A. cutoff. Admission is competitive and is based on a number of factors in addition to G.P.A. including science grades, recommendations, essay, interview results, and demonstration of your ability to succeed in 17 units or more per semester. Competition can vary from year to year depending upon the size and strength of the applicant pool. The average G.P.A. over the past four years has ranged from a 3.1 to 3.5. Check UOP PharmD website for results, and demonstration of your ability to succeed in 17 units or more successful applicants have had degrees. There is no absolute G.P.A. cutoff.

University of Southern California
www.usc.edu/schools/pharmacy/pharmd/

A minimum of 90 semester or 135 quarter units must be completed prior to entrance, with a minimum 3.0 cumulative G.P.A. and 2.75 Math and Science G.P.A. Sometimes a lower cumulative G.P.A. might be considered if grades in mathematics and science are stronger. It is highly recommended that Math and Science courses be completed during the regular academic year and not during a summer term. Pre-pharmacy requirements in the following areas must be completed if they are 9 years or older at the time the application is submitted: mammalian physiology, molecular biology, biochemistry and organic chemistry (full year). These courses must be repeated at a four-year college/university. Priority is given to those who have completed the Math and Science requirements at the time of the application and to those applicants who have completed more than the minimum amount of coursework. Candidates who have received or will receive a baccalaureate degree or who have completed units in excess of the minimum required would be considered more favorably than applicants who have fulfilled only minimum requirements. The School of Pharmacy Office of Admissions uses an interview process to make determinations on admissions. The interview consists of two parts: an oral interview and a writing test. The purpose of the interview is to assess your oral communication skills, writing skills, leadership ability, and your motivation or potential to be a pharmacist.

CAREER OPPORTUNITIES: Changes in health care delivery are giving the role of pharmacist a new dimension: significant responsibility as a member of the health team with direct patient care. Hospital pharmacists work on educating patients on safe use of drugs, advising prescribers about the appropriate dosing and following patient's response to usage. Career advancement exists in administration and research. In addition to dispensing medications, community pharmacists guide patients in non-prescription drugs and being alert to adverse pharmacies. Industrial Pharmacists may work in research and development including the formulation, evaluation, packaging and quality control of drugs. Some pharmacists are employed by governmental agencies such as narcotic divisions, food and drug evaluation and regulation, and public health.
PRE-PHYSICAL THERAPY
CAREER PATHWAY
(The following does not lead to an Associate of Arts degree)

There are several schools in California, both public and private, that offer the Masters degree in Physical Therapy. For specific information on schools not listed here please consult the catalogs of those schools and speak to a counselor.

California State University – Fresno
CSU Fresno offers a Bachelors of Science in Interdisciplinary Health and Rehabilitation Sciences. The major is designed to prepare undergraduate university students with prerequisite coursework, knowledge, attitudes and skills that will help them to gain admission to and succeed in graduate programs in the rehabilitation and health professions. Students apply to the master of Physical Therapy program after completing a bachelor of science in a related field. The following courses are considered the prerequisite courses for the program:

PREREQUISITE COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 200</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
</tr>
</tbody>
</table>

California State University – Long Beach
CSULB offers a Master’s of Physical Therapy degree only. Applicants must have a BS/BA degree in a related field, i.e. Biology (physiology) or KPE (Exercise Science), in order to apply. Also strong preparation in Biology, Chemistry, Physics, Anatomy and Physiology is recommended.

California State University – Northridge

The Physical Therapy program at CSUN leads to a Master’s in Physical Therapy. Completion of a Bachelor's degree prior to enrollment is required. All prerequisite courses must be completed with a minimum grade of “C” and minimum cumulative GPA of 3.0

Prerequisite courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 200</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
</tr>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Precalculus Mathematics</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
</tr>
</tbody>
</table>

CAREER OPPORTUNITIES: Physical therapists help persons with various diseases or injuries to overcome their disabilities. They are members of a rehabilitation team, which is directed by a physician. Although qualified physical therapists may treat many types of patients, some specialize in caring for children or for patients with arthritis, amputations or paralysis. Successful completion of a Bachelor or Master's Degree qualifies one to take the State of California examination to practice as a Physical Therapist.

See State University Colleges General Education List.

PRE-VETERINARY
CAREER PATHWAY

The following curriculum does not lead to an Associate in Arts Pre-Veterinary Degree. However, students could fulfill requirements for a Natural Sciences Degree by completing 18 units of science and math coursework to include a minimum of 2 Biological Sciences, 2 Physical Sciences and a math course beyond Intermediate Algebra.

Veterinary medicine is the broadest and most comprehensive of all the health professions. Academic preparation for veterinary school takes place at the undergraduate level, consisting of both lower division AND upper division coursework with a special emphasis in the sciences. In order to succeed academically, in the rigorous veterinary school curriculum, veterinary schools are looking for individuals with a highly developed science background. The more competitive veterinary schools are looking for grade point averages in the range of 3.5 – 4.0 GPA. Many, but not all veterinary schools require a bachelor’s degree. In most instances, a bachelor’s degree makes an applicant more competitive in the admission process. Most veterinary schools require a standardized graduate admissions test (e.g. GRE, MCAT, and VCAT). Extracurricular activities such as community activities, motivation, and leadership are essential. Animal related activities and/or animal related work experience is mandatory. Most colleges are looking for a strong demonstrated commitment to working with animals. Some schools actually require employment by a Veterinarian. Many veterinary schools require that you apply through the Veterinary Medical Colleges Application Service (VMCAS). This is a central application, distribution, collection and processing service at VMCAS, P.O. Box 24700, Oakland, CA 94623-1700.

COMMON COURSE REQUIREMENTS
FOR MOST VETERINARY SCHOOLS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Statistics</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
</tr>
</tbody>
</table>

University of California, Davis – School of Veterinary Medicine

www.vetmed.ucdavis.edu

Students are admitted to this school in the fall semester only. Students are required to complete a minimum of 72 semester units. This coursework must include 21 units of general education classes besides the prerequisite science classes. All of the required science courses must be completed at the time of application. The majority of students accepted to the school has completed 3 or more years of pre-professional coursework or possess a bachelor's degree. An applicant may study in any major provided the prerequisite courses are taken. The UC Davis Veterinary School requires a bachelor's degree. In most instances, a bachelor's degree makes an applicant more competitive in the admission process. Veterinary schools require that you apply through the Veterinary Medical Colleges Application Service (VMCAS). This is a central application, distribution, collection and processing service at VMCAS, P.O. Box 24700, Oakland, CA 94623-1700.

CAREER OPPORTUNITIES: Physical therapists help persons with various diseases or injuries to overcome their disabilities. They are members of a rehabilitation team, which is directed by a physician. Although qualified physical therapists may treat many types of patients, some specialize in caring for children or for patients with arthritis, amputations or paralysis. Successful completion of a Bachelor or Master's Degree qualifies one to take the State of California examination to practice as a Physical Therapist.

See State University Colleges General Education List.
curriculum. Extracurricular activities and substantial experience with animals (weights 25%), which should include working or volunteer experience with veterinarians, a minimum of 180 hours is required. The final interview may weigh approximately 15%. Annual tuition will be approximately $35,000.

ADDITIONAL REQUIREMENTS FOR ADMISSION: Three strong letters of evaluation, a personal statement, and an interview.

ENGL 100 Freshman Composition 4
ENGLISH (Any two additional classes) 3-3
HUMANITIES/FINE ARTS
(Any two-three additional classes) 8
SOCIAL/BEHAVIORAL SCIENCES
(Any two-three additional classes) 8

The following required upper division courses are not offered at Cerritos College and must be taken at the university: Biochemistry, Genetics, and Systemic Physiology. Effective 2005 application period, Vertebrate Embryology is no longer required.

Western University of Health Sciences — College of Veterinary Medicine
www.westernu.edu
The College of Veterinary Medicine at Western University of Health Sciences was founded on August 8, 1998. The college admitted its charter class of 85 students in the Fall of 2003. Of those students admitted in 2003 the average overall cumulative G.P.A. was 3.15 and the average prerequisite G.P.A. was 3.25. The class which entered Fall 2005 consisted of 100 students from 513 applications received. The cumulative grade point average was 3.35 and prerequisite grade point average was 3.49. All applicants must take either the Medical College Admissions Test (MCAT) or the General Graduate Record Examination (GRE). Animal-related experience must total at least 500 hours of hands-on experience that goes beyond observation. Supervisors should be able to assess applicant’s interest in animal well being, work habits and personal integrity. Appropriate venues include, but are not limited to the following: veterinary practices, animal medical environments, commercial animal production operations, regulatory animal control, humane shelters, animal entertainment (zoos etc.) and animal research institutions.

Applications for entry Fall 2006 will be available online by June 1, 2006. Annual tuition will be approximately $40,000.

ANTH 100 Cultural Anthropology 3
BIOL 202 Molecular Biology/Genetics 4
ENGL 100 Freshman Composition 4
ENGL 105 Technical Writing 3
HO 152 Normal & Therapeutic Nutrition 3
HUMANITIES (At least one course) 3
MICR 200 Principles & Applications of Microbiology 5
PSYC 101 General Introductory Psychology 3
SOCIAL SCIENCES (At least one course) 3
SPCH 100 Fundamentals of Oral Communication 3

The following required courses are not offered at Cerritos College, but must be taken at a university: Biochemistry and any two upper division biological sciences (Anatomy, Animal Science, Biology, Botany, Cell Biology, Ecology, Embryology, Endocrinology, Histology, Immunology, Kinesiology, Mammology, Parasitology, Reproduction, Toxicology, Pharmacology, Physiology, or Zoology.)

For more school specific information concerning the above listed requirements at individual out of state schools look up the specific veterinary school website.

Colorado State University Veterinary School
www.cvmbs.colostate.edu
Cornell University Veterinary School
www.vet.cornell.edu
Michigan State Veterinary College
www.cvm.msu.edu
Oregon State Veterinary School
www.vet.orst.edu/admiss.admiss.htm
Washington State University Veterinary School
www.vetmed.wsu.edu


THE REQUIREMENTS FOR VETERINARY SCHOOLS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

CAREER OPPORTUNITIES: Employment of veterinarians is expected to increase faster than the average for all occupations through the year 2012. Most veterinarians in the United States are seek a private practice. Other veterinarians work in a wide range of fields relating to public health, animal disease control, environmental protection, the biotechnology industry, higher education or research. New graduates continue to be attracted to small-animal medicine because they prefer to deal with pets and to live and work near heavily populated areas. Beginning private practice veterinarians may take positions requiring evening or weekend work to accommodate the extended hours of operation that many practices are offering. Some veterinarians take salaried positions in retail stores offering veterinary services. Self-employed veterinarians usually have to work hard and long to build a sufficient client base. Job prospects may be better for veterinarians who specialize in farm animals than for small animal practitioners because of low earnings in the former specialty and because many veterinarians do not want to work in rural or isolated areas. Continued support for public health and food safety, national disease control programs, and biological research on human health problems will contribute to the demand for veterinarians, although positions in these areas of interest are few in number.

PSYCHOLOGY
TRANSFER PROGRAM
COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY
AND THE UNIVERSITY OF CALIFORNIA

Psyc 101 General Introductory Psychology 3

ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University — Dominguez Hills
Psyc 210 Elementary Statistics 4
Or Math 112 Elementary Statistics 4
Psyc 220 Research Methods 4

California State University — Long Beach
Psyc 210 Elementary Statistics 4
Or Math 112 Elementary Statistics 4
Psyc 220 Research Methods 4
Psyc 241 Introduction to Psychobiology 3
California State University – Fullerton
PSYC 210  Elementary Statistics 4
PSYC 220  Research Methods 4

California State University – Los Angeles
University Requirement: ENGL 103
PSYC 241  Introduction to Psychobiology 3

University of California – Los Angeles
ANTH 115  Physical Anthropology 3
or BIOL 120  Introduction to Biological Science 4
or BIOL 200  Principles of Biology 5
CHEM 100  Introductory Chemistry 4
or CHEM 110  Elementary Chemistry 4
or CHEM 111  General Chemistry (5)
or H.S. CHEM completed with a “C” or better
PSYC 210  Elementary Statistics 4
or MATH 112  Elementary Statistics (4)
or MATH 115  Finite Mathematics (4)
or CIS 280  Object-Oriented Programming in C++ (3)
or MATH 170  Analytic Geometry and Calculus I (4)
or MATH 116  Calculus for Managerial Biological and Social Sciences (4)
PHIL 100  Introduction to Psychology 3
or PHIL 102  Introduction to Ethics (3)
or PHIL 106  Introduction to Logic (3)
or PHIL 202  Critical Thinking and Argumentative Writing (3)
PHYS 100  Elementary Physics 4
or PHYS 101  General Physics 4
or PHYS 201  Engineering Physics 4

University of California – Irvine
In fulfillment of the requirements below, a single course may be used only once.
CIS 101  Introduction to Computer Information Systems (3)
MATH 170  Analytic Geometry & Calculus I 4
and PSYC 210  Elementary Statistics 4
or MATH 112  Elementary Statistics (4)
PSYC 241  Introduction to Psychobiology 3
or PSYC 261  Social Psychology 3
or PSYC 271  Abnormal Psychology (3)

One Course from:
PSYC 150  Personal and Social Adjustment 3
PSYC 210  Elementary Statistics 4
PSYC 220  Research Methods 4
PSYC 241  Introduction to Psychobiology 3
PSYC 251  Developmental Psychology 3
PSYC 261  Social Psychology 3
PSYC 271  Abnormal Psychology 3

Two of the following:
ANTH 100  Cultural Anthropology 3
or ANTH 115  Physical Anthropology (3)
ECON 101  US & Global Economy 3
SOC 101  Introductory Sociology Principles 3

University of California – Riverside
A) 
PSYC 210  Elementary Statistics 4
PSYC 220  Research Methods 4

B) Complete one course in mathematics, statistics, or computer science
(Any UC transferable course from one of these 3 disciplines is acceptable to fulfill this requirement. PSYC 210 will not double count for this requirement.)
Note: The following course is strongly recommended to fulfill this area, as it is a prerequisite to UCR’s PSYC 11 “Psychological Methods: Research Procedures”
MATH 150  Precalculus Mathematics (4)
C) Complete one course in Biological Science
BIOL 120  Introduction to Biological Science 4
BIOL 200  Principles of Biology (5)
BIOL 201  Principles of Biology 5
BOT 120  Introduction to Plant Science 4
and ZOOL 120 Introduction to Animal Biology 4
D) Complete one course in Physical Science
ASTR 101  Elementary Astronomy (3)
ASTR 102  Introduction to Astronomy: Stars and the Universe (3)
ASTR 103  Introduction to Astronomy: The Solar System 3
ASTR 106  History of Astronomy 3
CHEM 100  Introductory Chemistry 4
CHEM 111  General Chemistry (5)
and CHEM 112  General Chemistry (5)
PHYS 201  Engineering Physics (4)
and PHYS 202  Engineering Physics (4)

No credit for ASTR 102 or 103 if taken after ASTR 101. UC transferable credit for ASTR 102 and 103: maximum credit, one course.
A UC transferable 3 semester/4 quarter unit geoscience course (such as geology or geography course, with the exception of cultural geography) may also be used towards the physical science requirement.
E) Complete two additional courses from areas B), C) or D) above.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all A.A. degree general education requirements for a total of at least 60 units.
CAREER OPPORTUNITIES: Graduate work is extremely important in Psychology. Those holding M.A., or Ph.D. in Psychology may find employment in teaching, private practice, research, health, and welfare programs. Persons without graduate degrees will find employment opportunities limited. See a counselor for further information.
See Cerritos College Graduation Requirements.
See California State University General Education List.

RADIO/TELEVISION BROADCASTING
The following Broadcast Media Program of Study has been designed to prepare student for an AA degree. Students interested in preparing for a Bachelor's Degree at a four-year college are referred to the Theater Arts Transfer Program.

Broadcast Media 25 Units
Complete 17 Core Units
JOUR 101  Beginning Newswriting and Reporting 3
JOUR 170  Broadcast Journalism 1
RTV 151  Motion Pictures, Radio and TV 3
RTV 152  Motion Pictures, Radio and Television 3
RTV 153  Introduction to Broadcasting 3
RTV 155  Radio Production 3

144
RTV 198 Directed Studies 1
or RTV 171 Occupational Work Experience in Radio/TV (1)

PLUS A MINIMUM OF 8 UNITS FROM THE FOLLOWING
MUS 146 Sound Recording Techniques 3
SPCH 140 Oral Interpretation of Literature 3
SPCH 145 Storytelling 3
SPCH 271 Voice and Articulation 3
TH 117 Stand-Up Comedy 3
TH 258 Writing for Movies and TV 3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete a minimum of 60 units to include (1) the above courses and units, (2) AA Degree General Education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Acting, announcing, directing, reporting, media/sound recording technician, media production assistant, and media publicity technician.

See Cerritos College Graduation Requirements.

RADIO/TELEVISION BROADCAST ANNOUNCING CERTIFICATE OF COMPLETION
This certificate helps the student focus on the study of and preparation for entry level employment in the field of broadcast announcing at radio and television stations, and in online broadcast ventures. This certificate is one of a two-part certificate combination that will begin to prepare the student for an associate degree in Broadcast Media. (See JOUR 141 – Broadcast Journalism)

Radio/Television Broadcast Announcing 17 Units
RTV 152 Introduction to Broadcasting 3
RTV 155 Radio Production 3
TH 156 Video Production 3
JOUR 170 Broadcast News 1
SPCH 140 Oral Interpretation of Literature 3
SPCH 271 Voice and Articulation 3
RTV 298 Directed Studies in Radio – TV* 1
or RTV 171 Occupational Work Experience in Radio-TV* (1)

* Should be a broadcasting-related internship

SECURITY MANAGEMENT ASSOCIATE IN ARTS DEGREE
The following Security Management Associate in Arts Degree program meets guidelines established by the California Community Colleges Chancellor's Office.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete a minimum of 60 units, including (1) the Security Management Core requirements and (2) A.A. degree general education requirements.

SECURITY MANAGEMENT CORE UNITS
AJ 101 Introduction to Administration of Justice 3
AJ 112 Introduction to Security Management 3
AJ 210 Legal Aspects of Security Management 3
AJ 211 Investigative Techniques for Security Management 3
AJ 212 Public Safety and Security Management 3
AJ 213 Public Safety Communications 3
AJ 214 Information Security 3

CAREER OPPORTUNITIES: Upon completion of the Security Management Associate in Arts Degree program employment within the public and private security sector is available. The security industry encompasses a wide range of services from standard guard duties to complex responsibilities ranging from public safety to major corporate security activities. Those students who are existing employees within the security industry will have the advantage of a quality education, which can be applied towards promotional, and assignment responsibilities. These opportunities range from supervision of a relatively few security personnel to management of both public and private security agencies. The career opportunities within the security industry consist of positions in loss prevention, risk management asset protection, health care, government, entertainment, sports, retail and corporate settings.

See Cerritos College Graduation Requirements.

SIGN LANGUAGE CERTIFICATE OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS UNITS
SL 101 Beginning American Sign Language 3
SL 102 Intermediate American Sign Language 3
SL 201 Advanced American Sign Language 3
SPCH 120 Fundamentals of Interpersonal Communication 3
SPCH 271 Voice and Articulation 3

TOTAL VERIFICATION REQUIREMENTS: 12

Although many of these courses are transferable, this Certificate of Completion is nontransferable. Please see counselors or the respective department for additional alternatives.

SOCIAL WELFARE CAREER PATHWAY
(The following curriculum does not lead to an Associate in Arts Degree. To earn an AA degree, see Sociology or Psychology in the catalog for the major requirements.)

LOWER DIVISION PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS
CSU Long Beach and CSU Los Angeles offer the Bachelor of Arts in Social Work.

California State University – Long Beach: UNITS
A&P 120 Introduction to Human Anatomy & Physiology 4
or A&P 130 Human Anatomy and Physiology 5
ANTH 100 Cultural Anthropology 3
PSYC 101 General Introductory Psychology 3
PSYC 210 Elementary Statistics 4
or MATH 112 Elementary Statistics (4)
SOC 101 Introductory Sociology Principles 3

Additional coursework that will be considered advantageous; Any Ethnic Studies, Women Studies, and Gerontology or Recommended SOC 220 (Intro to Human Services)

California State University – Los Angeles:
PSYC 101 General Introductory Psychology 3
or SOC 101 Introductory Sociology Principles (3)
ENGL 103 Critical and Argumentative Writing 3
MATH 112 Elementary Statistics 4
Students transferring to CSULA are encouraged to take ENGL 103 as their CSU General Education Critical Thinking requirement, particularly if they have not already fulfilled that requirement. Although ENGL 103 is not a requirement for the major, taking it will satisfy the prerequisite for a graduation requirement at CSULA. Please see a counselor if you have questions or need clarification.

CAREER OPPORTUNITIES: Social Workers are employed in varied settings, including the major societal institutions; health and mental health care, child welfare, family services, government, education, justice, aging services, recreation, labor and industry and religion. They work in many job classifications: direct service, community organization supervision, consultation, management and administration, education and training, policy analysis and research.

See State University General Education List

SOCIOLOGY

TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION

FOR THE CALIFORNIA STATE UNIVERSITY

AND UNIVERSITY OF CALIFORNIA

UNITS

SOC 101 Introductory Sociology Principles 3
PSYC 210 Elementary Statistics 4
or MATH 112 Math Statistics (4)

Recommended Electives

ANTH 100 Cultural Anthropology 3
PSYC 101 General Introductory Psychology 3
SOC 215 Sociology of Cultural Diversity: Challenge and Change 3

LOWER DIVISION REQUIREMENTS

FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills

No other requirements other than the common lower-division preparation.

California State University – Fullerton

No other requirements other than the common lower-division preparation. All courses counting toward the major must be taken for a letter grade.

California State University – Los Angeles

No other major requirements other than the common lower-division preparation. Students who transfer without having completed CERRITOS’ SOC 101 and CSULAS SOC 210A & SOC 210B (for which Cerritos does not have an articulated equivalent) are strongly recommended to include those courses among their first courses at CSULA.

Students transferring to CSULA are encouraged to take ENGL 103 as their CSU General Education Critical Thinking requirement, particularly if they have not already fulfilled that requirement. Although ENGL 103 is not a requirement for the major, taking it will satisfy the prerequisite for a graduation requirement at CSULA. Please see a counselor if you have questions or need clarification.

California State University – Long Beach

In addition to the common lower-division preparation, students should complete the following requirements:

ANTH 100 (Recommended) Cultural Anthropology 3
SOC 201 Social Problems 3

California State University – Pomona

Please note that only MATH 112, Elementary Statistics, is accepted for Cal Poly’s STA 120, Elementary Statistics with Applications. Cerritos’ PSYC 210 Elementary Statistics is not articulated.

In addition to the common lower-division preparation, students must complete the following requirements:

SOC 201 Social Problems 3
PSYC 220 Research Methods 3
PSYC 101 General Introductory Psychology 3

Students should take the following general education courses to fulfill support course requirements. Please see a counselor for clarification.

SUPPORT COURSES

ENGL 102 Freshman Composition and Literature 3
or ENGL 103 Critical and Argumentative Writing (3)
PHIL 106 Introduction to Logic 3

University of California – Irvine

In addition to the common lower-division preparation, students must complete the following requirements:

SOC 201 Social Problems 3
MATH 170 Analytic Geometry and Calculus I 4

TWO COURSES FROM:

SOC 110 Marriage and the Family 3
or SOC 210 American Minority Relations (3)
or PSYC 261 Social Psychology (3)

Two additional social science courses are required.

An approved list of courses is available from www.assist.org

An additional computer requirement can be satisfied by choosing from the options below:

CIS 101 Introduction to Computer Information Systems 3
or CIS 280 Object-Oriented Programming in C++ (3)
and CIS 182 JAVA Programming (3)

University of California – Los Angeles

In addition to the common lower-division preparation, students must complete the following requirements:

MATH 115 Finite Mathematics 4
or MATH 116 Calculus for Managerial, Biological, and Social Sciences (4)
MATH 170 Analytic Geometry and Calculus I (4)

The Sociology Department at UCLA requires you complete all major preparation courses available at Cerritos prior to transferring. All courses must be taken for a letter grade.

University of California – Riverside

In addition to the common lower-division preparation, students must complete the following requirements:

One additional lower division sociology course. Any UC transferable sociology course is acceptable.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above common division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.
CAREER OPPORTUNITIES: The degree provides a strong preparation for positions in business, social sciences, government, public relations, or journalism. It provides a good base for future study in law, education, medicine, social work or counseling.

See Cerritos College Graduation Requirements.
See State University General Education List.

**SPANISH TRANSFER PROGRAM**

**COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 101</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 102</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 201</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 202</td>
<td>4</td>
</tr>
</tbody>
</table>

**ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State Polytechnic University – Pomona**

The common lower division preparation for the California State University listed previously is required. SPAN 111 and SPAN 112 are also accepted in place of the common lower division preparation courses of SPAN 101 and SPAN 102.

**California State University – Dominguez Hills**

The common lower division preparation for the California State University listed previously is required. SPAN 111 or SPAN 112 are also accepted in place of the common lower division preparation courses of SPAN 101 or SPAN 102 respectively. There are no additional requirements other than the common lower division preparation.

**California State University – Fullerton**

The common lower division preparation for the California State University listed previously is required. SPAN 111 is also accepted in place of the common lower division preparation course of SPAN 101 and SPAN 112 is also accepted in place of the common lower division preparation course of SPAN 102. In addition, the following courses are required:

- SPAN 213 Living Spanish Grammar and Written Communication 2
- SPAN 214 Living Spanish Grammar and Written Communication (2)
- SPAN 281 Beginning Conversational Spanish 3
- SPAN 282 Intermediate Conversational Spanish (3)
- SPAN 283 Advanced Conversational Spanish (3)

**California State University – Long Beach**

There are no additional requirements other than the common lower division preparation previously listed for the California State University. Students who have completed sufficient high school Spanish or equivalent may be eligible to take upper-division courses as soon as proficiency requirements have been met. One year of a second foreign language at the university level, or equivalent is also required. No course being used to satisfy any major requirement for the B.A. may be taken on a Credit/No Credit basis.

**California State University – Los Angeles**

No additional requirements other than the common lower division preparation previously listed for the California State University. As an alternative to completing the common lower division preparation courses listed above, students can demonstrate equivalent language competency on the department's placement exam.

Students are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet a graduation requirement as CSULA as the prerequisite for their writing proficiency requirement.

**University of California – Irvine**

- SPAN 101 Elementary Spanish 5
- SPAN 102 Elementary Spanish 5
- SPAN 201 Intermediate Spanish 5
- SPAN 202 Intermediate Spanish 4

At least one course is required from four different areas (writing, literature, history, and philosophy). An approved list of courses is available from ASSIST. Please consult a counselor, if necessary, for these additional classes.

**University of California – Riverside**

- SPAN 101 Elementary Spanish 5
- SPAN 102 Elementary Spanish 5
- SPAN 201 Intermediate Spanish 5
- SPAN 202 Intermediate Spanish 4

Note: Students may either take courses listed above or demonstrate equivalent proficiency (as measured by a placement exam at UCR).

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

(1) Meet the above requirements as listed for a state university, (2) complete the AA Degree general education requirements, and (3) take electives to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: Overseas personnel in American corporations, airline hostess, travel agency personnel, government positions abroad, teaching, librarian, interpreter, and translator.

See Cerritos College Graduation Requirements.
See State University General Education List.

**SPEECH COMMUNICATION CERTIFICATE OF COMPLETION**

A Certificate of Completion shall be awarded to the student who completes with a grade of “C” or higher the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 110 Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 125 Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 120 Fundamentals of Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 130 Fundamentals of Speaking</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 132 Fundamentals of Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 200 Contemporary Communication Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL VERIFICATION REQUIREMENTS** 15
SPEECH

TRANSFER PROGRAM

LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Fullerton
Bachelor of Arts in Speech Communication, Human Communication Studies.

Double counting of Human Communication courses for general education and major requirements is permitted only for SPCH 130.

For Bachelor of Arts in Communications – see a counselor

SPCH 130  Fundamentals of Speaking 3

California State University – Long Beach
Bachelor of Arts in Speech Communication

OPTION IN GENERAL SPEECH

SPCH 100  Fundamentals of Oral Communication 3
or SPCH 120  Fundamentals of Interpersonal Communication 3
SPCH 235  Fundamentals of Argumentation And Persuasion 3

Choose (1) from the following:

SPCH 130  Fundamentals of Speaking 3
SPCH 132  Fundamentals of Small Group Communication 3
SPCH 150  Organizational Communication 3
SPCH 271  Voice and Articulation 3

OPTION IN INTERPERSONAL AND ORGANIZATIONAL COMMUNICATION

SPCH 100  Fundamentals of Oral Communication 3
or SPCH 120  Fundamentals of Interpersonal Communication 3
SPCH 130  Fundamentals of Speaking 3
SPCH 150  Organizational Communication 3

Choose (1) from the following:

SPCH 132  Fundamentals of Small Group Communication 3
SPCH 235  Fundamentals of Argumentation And Persuasion 3
SPCH 271  Voice and Articulation 3

OPTION IN RHETORICAL STUDIES

SPCH 130  Fundamentals of Speaking 3
SPCH 235  Fundamentals of Argumentation And Persuasion 3

Choose (1) from the following:

SPCH 132  Fundamentals of Small Group Communication 3
SPCH 271  Voice and Articulation 3
JOUR 100  Intro to Mass Communication 3

California State University – Los Angeles
Bachelor of Arts – Communication

Students transferring to CSULA are encouraged to take ENGL 103 as their CSU General/Education Critical Thinking requirement. This will also meet a graduation requirement at CSULA as their prerequisite for their writing proficiency requirement.

Core Requirements for the General Option

SPCH 100  Fundamentals of Oral Communication 3
SPCH 235  Argumentation and Persuasion 3

Choose (3) from the following for a total of (8) units of electives:

SPCH 120  Fundamentals of Interpersonal Communication 3
SPCH 132  Fundamentals of Small Group Communication 3
SPCH 140  Oral Interpretation of Literature 3

SPCH 239  Forensics Workshop 2
SPCH 240  Oral Interpretation: Reader’s Theatre 3

Concentration in Rhetoric - Select

SPCH 239  Forensics Workshop 2

Concentration in Performance Studies - Select

SPCH 140  Oral Interpretation of Literature 3
SPCH 240  Oral Interpretation: Reader’s Theatre 3

Concentration in Organizational Communication and Public Relations – Select

SPCH 132  Fundamentals of Small Group Communication 3

Concentration in Interpersonal Communication/Language and Social Interaction – Select

SPCH 120  Fundamentals of Interpersonal Communication 3
SPCH 132  Fundamentals of Small Group Communication 3

For single subject teaching option – see a counselor

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 unit minimum and all AA degree general education requirements for a total of at least 60 units.

CAREER OPPORTUNITIES: Public relations, Sales, Teaching, Law, Politics, Administration, Communications, Consulting, and Broadcasting.

See Cerritos College Graduation Requirements.
See State University General Education List.

SPEECH-LANGUAGE PATHOLOGY AIDE CERTIFICATE OF ACHIEVEMENT

A Certificate of Achievement shall be awarded to the student who completes with a grade of “C” or better the following courses:

CD 110  Child Development 3
CD 139  Observation, Assessment and Positive Guidance of Childhood Behavior 3
CDSE 50  Survey of Special Education 3
SLP 100  Introduction to Speech and Language Pathology 3
SLP 110  Normal Communication, Disorders and Differences 4
SLP 125  Childhood Disorders and Treatment 5

TOTAL CERTIFICATE REQUIREMENTS 21

Career Opportunities: Upon completion of the courses, employment is available in educational settings where the aide will be supervised by a licensed Speech-Language Pathologist.

SPEECH-LANGUAGE PATHOLOGY ASSISTANT

The Speech-Language Pathology Assistant curriculum prepares graduates to work under the supervision of a licensed Speech-Language Pathologist, who evaluates, diagnoses, and treats individuals with various communication disorders. The program provides a concentration of speech-language classes, related courses, and supervised field experiences that will prepare students to assist speech-language pathologists in treating disorders related to articulation and phonology, anomalies and hearing. In addition, students will be trained in the use of alternative and augmentative communication.

Courses provide instruction in methods of screening for speech, language, and hearing disorders and in following written protocols designed
to remediate individual communication problems. Students are placed in supervised field experiences in school, hospital, and rehabilitation settings to work with different types and ages of clients. Graduates will be eligible to apply for licensure with the California Speech-Language Pathology and Audiology Board. Employment opportunities exist in health care and education settings where the Speech-Language Pathology Assistant must be supervised by a licensed Speech-Language Pathologist.

CRIMINAL BACKGROUND CHECK

Clearance of a criminal background check may be required prior to field experience. Students who do not clear agency requirements are not eligible for clinical placement and will, consequently, be ineligible to continue in the course. If there is any concern regarding clearance of a criminal background check, please contact the Health Occupations Division for additional information.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

A minimum of 60 degree applicable units including the following required courses completed with a grade of “C” or better must be completed to qualify for the A.A. Degree.

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Units</th>
<th>First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First Semester</td>
</tr>
<tr>
<td>3</td>
<td>CD 110</td>
</tr>
<tr>
<td>3</td>
<td>CDEC 113</td>
</tr>
<tr>
<td>2</td>
<td>EDT 104</td>
</tr>
<tr>
<td>3</td>
<td>SLP 100</td>
</tr>
<tr>
<td>4</td>
<td>SLP 110</td>
</tr>
</tbody>
</table>

| First Year | 15 |

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>12.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLP 240 Childhood Field Experience</td>
<td>2.5</td>
</tr>
<tr>
<td>SLP 245 Adult Field Experience</td>
<td>2.5</td>
</tr>
</tbody>
</table>

| Total Units | 50.5 |

Recommended Elective: A&P 120
See Cerritos College Graduation Requirements

**TEACHING CREDENTIAL PREPARATION**

The State of California provides for a two-step, five-year program leading to the Professional Clear Teaching Credential. A student may complete the requirements for a Preliminary Clear Credential within an approved professional preparation program including student teaching and may be employed at that point, providing all requirements have been met (except the fifth year). Within five years, the student must complete an additional year of study. At that point, a Professional Clear Teaching Credential is granted. The required lower division courses may be completed at Cerritos College. For more information, log on to the California Commission on Teaching Credentialing website at www.ctc.ca.gov and the TEACH California Website at www.calteach.com

**SINGLE SUBJECT INSTRUCTION CREDENTIAL**

(Primarily for Secondary Schools)

A teacher authorized for Single Subject instruction may be assigned to teach this subject at any grade level—pre-school through classes for adults. In practice, most teachers with Single Subject authorization teach in junior or senior high schools, grades 7-12.

A candidate lacking this major background may validate competency by passing an examination in a specified subject matter category. No minor is required.

**MULTIPLE-SUBJECT INSTRUCTION CREDENTIAL**

(Liberal Studies/Elementary School Teaching)

A teacher authorized for Multiple Subject instruction may be assigned to teach in any self-contained, multiple subject classroom—pre-school through classes for adults. In practice, most teachers with Multiple Subject authorization teach in Early Childhood and Elementary Education, pre-school through grade six.

Completion of the courses recommended below will partially satisfy requirements for the Liberal Studies elementary school teaching option offered at the indicated CSU’s and UCR. The courses are part of a curriculum that can be started at a community college and completed at the CSU or UCR. The entire curriculum is designed for individuals who seek the pre-professional subject matter preparation for elementary school teaching consistent with the standards established by the California Commission on Teacher Credentialing.

According to California law, any major can be selected to partially satisfy elementary school teacher preparation requirements. A Liberal Studies major however, is recommended because it provides the best preparation for future elementary school teachers. At most universities, the Liberal Studies major incorporates professional and subject matter content included in the California Teaching Standards for elementary school instruction.

With the recent enactment of the No Child Left Behind federal regulations, school districts are now requiring a passing score on the California Subject Examination for Teachers (CSET) for all new teachers hired. It is recommended that students take the CSET after transfer, per the advice of university department or credential advisors. The CSET is administered by the National Evaluation System, Inc. It is a five-hour test consisting of three separate subtests, each containing both multiple-choice and essay questions. Subtest I measures knowledge in reading, language and literature, history and social science; Subtest II covers science and mathematics; and Subtest III includes physical education, human development; visual and performing arts. Once a subtest has been passed, it does not have to be taken again, as long as the score is
used toward certification within five years of the testing date. For further information on the CSET, visit the CSET website at www.cset.nesinc.com.

Students who wish to choose an academic major other than Liberal Studies in order to prepare for elementary school teaching should schedule an appointment with a counselor.

Students who choose a liberal arts major in order to benefit from a broad interdisciplinary liberal arts education and do not wish to pursue elementary school teaching should see a Cerritos College counselor for advisement. Requirements may vary from those listed below.

An Associate in Arts Degree in liberal studies is not available at Cerritos College. Students may however, declare Liberal Arts & Science-General, as a major.

CBEST

It is recommended that students seeking a teaching credential take the CBEST (California Basic Educational Skills Test) the semester before transferring to a university. The CBEST is an entrance requirement for most university credential programs. The CBEST verifies proficiency in reading, mathematics, and writing. Passing the CBEST is a requirement for obtaining a teaching credential issued by the California Commission on Teacher Credentialing and is required prior to student teaching. A test fee is required. For more information, log onto www.cbest.nesinc.com

COMMON LOWER DIVISION PREPARATION

FOR THE CALIFORNIA STATE UNIVERSITY

See individual CSU's listed below for additional courses.

English 100
Speech 130
English 103, Philosophy 106, 202, or Speech 235
Biology 120 (Except CSU Los Angeles)
Math 110A and 110B (Except CSU Fullerton)
History 102
History 245+
Political Science 101
Child Development 110+
+Recommended for CSU Fullerton Traditional Curriculum

CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS

Important Notice: Requirements may be updated. New students beginning to take courses for transfer to Liberal Studies Program should consult with a counselor or contact the Liberal Studies Program for current information.

English 100
English 102 or 103++
Speech 100, 120, 130, 132, or 150
English 103*, Philosophy 106, 202, or Speech 235
Biology 120
Any Physical Science course from Area B1* (ESCI 101, Geog 101 or Physical Science 100 preferred))
Math 110A and 110B
Art 100, 101, or 102
Music 100,101 or 105
English 222
History 101, 102, or 103
Political Science 101 or 201
History 120
History 245
Child Development 110
Any course from Area E*
++English 103 satisfies both requirements

Students may also choose to complete course work for the Art, Math, or Special Option before transferring. Please log on to www.assist.org for option course that can be competed at Cerritos College.

CALIFORNIA STATE UNIVERSITY, FULLERTON

Students can complete requirements to prepare to become elementary school teachers in multiple ways at CSU Fullerton. They can major in Child and Adolescent Development or Liberal Studies and complete the traditional curriculum. Or they can major in Child and Adolescent Development or Liberal Studies and complete the STEP curriculum (see description of STEP below). Please see a counselor, and consult www.ASSIST.org for the major requirements for Child and Adolescent Development or Liberal Studies, depending on the preparation program you choose.

Traditional Curriculum

Important Notice: Requirements may be updated. See note (+++) below. Students should see a Cerritos College counselor or contact the CCT for current information.

Speech 100, 120, 130, 132, or 150
English 100
English 103, Philosophy 106, 202, Psychology 103, or Speech 235
Geology 101 or Geography 101 or Earth Science 110
Biophysics 120
Any Mathematics course from Area B.3* (Mathematics 100 or 140 preferred)
One course from: Music 100 or 105 or Theatre 101
English 222
History 101 or 102 (preferred)
Political Science 101 or 201
Geography 105
One course from Area E*

Recommended additional courses:

Child Development 110
History 120
History 245
Physical Education 180 and 181
Physical Science 112 or Chemistry 100 or Chemistry 105
* Refers to designated areas of the CSU General Education Certification requirements.

It is important to request CSU GE certification when transferring to CSU Fullerton.

All courses are highly recommended, but not required as preparation for the CSET exam. It is also highly recommended, but not required, that students transfer with twelve units completed in CSU GE Areas B. C, and D.

+++For the latest information or clarification about program requirements, either call the Center for Careers in Teaching (714-278-7130) or check the CCT website at www.fullerton.edu/cct. Community college students are advised to attend an information seminar at CSUF. Students are advised to bring transcripts. Seminar dates are on the website.

Students can also attend a CCT seminar at Cerritos and can get information on dates from the Transfer Center. They may also be able to see the CCT transfer representative there.

Streamline Teacher Education Program (STEP)
STEP is the Streamlined Teacher Education Program designed for students to earn their Bachelor’s degree and Multiple Subject Credential in a reduced number of units. The courses for this program (see below) are very specific and all those would need to be completed with a “C” or better and a grade point average of 2.5 prior to transfer. Students can sign up with the representative from CSU Fullerton’s Center for Careers in Teaching (714-278-7130)

- Speech 100, 120, 130 (preferred), 132 or 150
- English 100
- English 103, Philosophy 106, Philosophy 202, Psychology 103 or Speech 235
- Chemistry 105
- Physical Science 112
- Earth Science 110
- Biology 120
- Any Math course from area B.3*
- Music 100, Music 105, Theatre 101
- History 245
- History 102
- Political Science 101
- Geography 105
- Child Development 110 or Psychology 251
- Education/Elementary School Teachers 100 & 200
- English 222
- History 120
- * Refers to designated areas of the CSU General Education Certification requirements.

CALIFORNIA STATE UNIVERSITY – LOS ANGELES
The following courses represent a partial list of the necessary curriculum for transfer. Please see counselor for additional requirements or log on to www.assist.org.

- Speech 130
- English 100
- English 102
- English 103
- Speech 235, Philosophy 202 or 106
- Math 110A and Math 110B
- Math 105
- History 245
- History 102
- Political Science 101 or 201
- Physical Education 141
- Child Development 110

CALIFORNIA STATE UNIVERSITY, LONG BEACH
Teacher TRAC/ITEP Curriculum
The Teacher TRAC curriculum fulfills most lower division requirements for CSULB’s Integrated Teacher Education Program. Upon completion of ITEP a student will meet requirements for both a B.A. in Liberal Studies and preliminary multiple subject teaching credential for teaching grades K through 6th, without having to enroll in a year-long credential program. To be eligible for Teacher TRAC, students must have a minimum 2.50 GPA and be ready to enroll for Math 60 and English 52. Applications and further information are available at the Teacher TRAC Center and at the Teacher TRAC website, www.teachertrac.com.

- Biology 120
- Chemistry 105
- Child Development 110
- Earth Science 110

Education/Elementary School Teachers 100+
Education/Elementary School Teachers 200+
Educational Technology 110
English 100
Geography 105
History 120
History 102
History 245
Math 105
Math 110A
Math 110B
Music 105
Physical Science 112
Political Science 101
Speech 130
Theatre 101
English 102, 230A, 230B, 246A, 246B, 248A, or 248B
English 103, Philosophy 106, 202, or Speech 235
Philosophy 100, 102, or 200
+Courses are restricted to official Teacher TRAC students only.

Traditional Curriculum
The following courses meet lower division requirements for the traditional teacher preparation program consisting of BA and yearlong credential program. Teacher TRAC requirements differ from those below.

- English 100
- Speech 130
- English 103, Philosophy 106, 202, or Speech 235
- Biology 120
- Geology 101
- Physical Science 112
- Math 110A and 110B
- Music 105
- Theatre 101
- English 230A, 230B, 246A or 246B
- Foreign Language 3rd semester course
- Philosophy 100, 102 or 200
- History 102
- Political Science 101 or 201
- Anthropology 100
- Geography 105
- History 120
- History 245 or 246
- Psychology 101
- Child Development 110

Note: CSULB WAIVES AREA E* FOR TEACHER TRAC/ITEP AND TRADITIONAL LIBERAL STUDIES MAJORS

*REFERS TO DESIGNATED AREAS OF THE CSU GENERAL EDUCATION CERTIFICATION REQUIREMENTS

UNIVERSITY OF CALIFORNIA, RIVERSIDE
There are no mandatory lower division courses for the UCR Liberal Studies major. The courses listed below have been determined by the UCR faculty as courses that will best prepare students for the CSET.

- English 100
- English 103, Philosophy 202, or Psychology 103
- Biology 120 or Biology 201+200 or Botany 120 + Zoology 120
- Chemistry 100 or Chemistry 111
- Biology 105
THEATRE ARTS
ASSOCIATE IN ARTS DEGREE PROGRAM

The following Broadcast Program of Study has been designed to prepare students for an AA Degree. Students interested in preparing for a Bachelor’s Degree at a four-year college are referred to the Theatre Arts Transfer Program.

ACTING OR TECHNICAL EMPHASIS 32 UNITS MINIMUM

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 101</td>
<td>Introduction to the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>TH 102</td>
<td>History of the Classical Theatre</td>
<td>3</td>
</tr>
<tr>
<td>TH 103</td>
<td>History of the Modern Theatre</td>
<td>3</td>
</tr>
<tr>
<td>TH 110</td>
<td>Fundamentals of Acting</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 130</td>
<td>Rehearsal/Performance for the Minor Role</td>
<td>1</td>
</tr>
<tr>
<td>TH 131</td>
<td>Rehearsal/Performance for the Supporting Role</td>
<td>2</td>
</tr>
<tr>
<td>TH 132</td>
<td>Rehearsal/Performance for the Leading Role</td>
<td>3</td>
</tr>
<tr>
<td>TH 133</td>
<td>Stage Crew Activity</td>
<td>1</td>
</tr>
<tr>
<td>TH 134</td>
<td>Technical Production</td>
<td>2</td>
</tr>
</tbody>
</table>

Choose (1) from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 111</td>
<td>Intermediate Acting to Characterization</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 114</td>
<td>Voice for Acting</td>
<td>2</td>
</tr>
<tr>
<td>TH 115</td>
<td>Stage Movement and Combat</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose (1) from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 120</td>
<td>Theatre Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>TH 221</td>
<td>Costuming for the Stage</td>
<td>3</td>
</tr>
<tr>
<td>TH 222</td>
<td>Stage Lighting</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose (2) from the following for a total of (6) units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 108</td>
<td>Improvisation for the Theatre</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 111</td>
<td>Intermediate Acting to Characterization</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 114</td>
<td>Voice for Acting</td>
<td>2</td>
</tr>
<tr>
<td>TH 115</td>
<td>Movement for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>TH 120</td>
<td>Theatre Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>TH 123</td>
<td>Stage Make-Up</td>
<td>3</td>
</tr>
<tr>
<td>TH 136</td>
<td>Community Theatre Production</td>
<td>2</td>
</tr>
<tr>
<td>TH 212</td>
<td>Scene Study</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 213</td>
<td>Historical Styles of Acting</td>
<td>3</td>
</tr>
<tr>
<td>TH 221</td>
<td>Costuming for the Stage</td>
<td>3</td>
</tr>
<tr>
<td>TH 222</td>
<td>Stage Lighting</td>
<td>3</td>
</tr>
<tr>
<td>TH 226</td>
<td>Introduction to Scene Design</td>
<td>2</td>
</tr>
<tr>
<td>MUS 146</td>
<td>Recording Techniques</td>
<td>2</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

A minimum of 60 units must be completed to include: 1) one of the options above, 2) AA Degree general education requirements, and 3) electives as needed.

CAREER OPPORTUNITIES: Acting, announcing, directing, scriptwriting, reporting, construction and painting technician, costume construction technician, lighting and design technician, media/sound recording technician, theatre and media production assistant, playwriting, theatre management and box office worker, stage and media publicity technician.

See Cerritos College Graduation Requirements.

THEATRE ARTS
TRANSFER PROGRAM

ADDITIONAL LOWER DIVISION REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

<table>
<thead>
<tr>
<th>University</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Dominguez Hills</td>
<td>TH 101 Introduction to the Theatre</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>TH 110 Fundamentals of Acting</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>TH 120 Theatre Stagecraft</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: The Theatre Art program strongly suggests taking between six to eight courses of college preparatory English as well as speech, diction, singing, dance, and physical education.

California State University – Fullerton

Acting Emphasis:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 101</td>
<td>Introduction to the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>TH 111</td>
<td>Intermediate Acting to Characterization</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 114</td>
<td>Voice for Acting</td>
<td>2</td>
</tr>
<tr>
<td>TH 115</td>
<td>Stage Movement and Combat</td>
<td>3</td>
</tr>
<tr>
<td>TH 120</td>
<td>Theatre Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>or TH 221</td>
<td>Costuming for the Stage</td>
<td>(3)</td>
</tr>
<tr>
<td>TH 123</td>
<td>Stage Make-Up</td>
<td>3</td>
</tr>
<tr>
<td>TH 212</td>
<td>Scene Study</td>
<td>3.5</td>
</tr>
<tr>
<td>SPCH 140</td>
<td>Oral Interpretation of Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Technical Production/Design Emphasis:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 101</td>
<td>Introduction to the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>TH 111</td>
<td>Intermediate Acting to Characterization</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 120</td>
<td>Theatre Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>TH 123</td>
<td>Stage Make-Up</td>
<td>3</td>
</tr>
<tr>
<td>TH 221</td>
<td>Costuming for the Stage</td>
<td>3</td>
</tr>
<tr>
<td>TH 226</td>
<td>Introduction to Scenic Design</td>
<td>2</td>
</tr>
</tbody>
</table>

Other Performance and Production emphasis: Directing; playwriting; and Entertainment Studies; Additional Concentrations: Liberal Arts and Teaching. Please see a counselor for other emphasis, concentrations, and Bachelor of Fine Arts requirements.

California State University – Los Angeles

Core requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 110</td>
<td>Fundamentals of Acting</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 114</td>
<td>Voice for Acting</td>
<td>2</td>
</tr>
<tr>
<td>TH 221</td>
<td>Costuming for the Stage</td>
<td>3</td>
</tr>
<tr>
<td>TH 222</td>
<td>Stage Lighting</td>
<td>3</td>
</tr>
<tr>
<td>PE 182A</td>
<td>Dance, Modern, Beginning</td>
<td>2</td>
</tr>
<tr>
<td>PE 184</td>
<td>Choreography</td>
<td>2</td>
</tr>
<tr>
<td>PE 186A</td>
<td>Beginning Ballet</td>
<td>2</td>
</tr>
</tbody>
</table>
Curricula, Requirements for Majors, Certificates and Transfer Programs

Theatre Arts option (in addition to above requirements):

TH 111 Intermediate Acting to Characterization 3.5
TH 212 Scene Study 3.5
TH 120 Theatre Stage Craft 3

NOTE: Students are advised to complete ENGL 103 as their CSUGE Critical Thinking requirement. This will also meet a graduation requirement at CUSLA as their prerequisite for their writing proficiency requirement.

ENGL 103 Critical and Argumentative Writing 3

California State University – Long Beach

TH 110 Fundamentals of Acting 3.5
TH 115 Stage Movement and Combat (optional) (3)
TH 120 Theatre Stage Craft 3
TH 123 Stage Make-Up (optional) (3)
TH 221 Costuming for the Stage 3
TH 222 Stage Lighting 3

Theatre Options: Performance; Technical Theatre

Note: For Performance majors, at the beginning of the semester, all incoming students are required to audition for admittance to certain upper division classes and are therefore used for appropriate placement of students at their level of competency.

University of California – Irvine

Drama Major:

TH 102 History of the Classical Theatre 3
TH 103 History of the Modern Theatre 3
TH 110 Fundamentals of Acting 3.5
TH 111 Intermediate Acting to Characterization 3.5
TH 120 Theatre Stage Craft 3
TH 221 Costuming for the Stage 3
TH 222 Stage Lighting 3
TH 226 Introduction to Scenic Design 2

Plus, two (2) courses in Dance (Ballet, Jazz, Modern, Tap) or four units from:

TH 114 Voice for Acting 2
TH 115 Stage Movement and Combat 3

University of California – Los Angeles

These courses are not required but provide recommended preparation for the program:

TH 110 Fundamentals of Acting 3.5
TH 114 Voice for Acting 2
TH 115 Stage Movement and Combat 3
TH 133 Stage Crew Activity 1
TH 221 Costuming for the Stage 3
TH 222 Stage Lighting 3

Fall Admissions Only. Admission requirements include: Supplemental application, personal essay, two letters of recommendation, an audition/interview, a writing sample, and a minimum 3.0 GPA at the time of the application. For more information see http://www.tft.ucla.edu/auditiontour. In addition, students must complete general education coursework prior to transfer.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the following: (1) Above transfer requirements, (2) the AA Degree general Education requirements, and (3) electives to achieve a minimum of 60 units.

CAREER OPPORTUNITIES: Preparation for the Theatrical profession as performer, technician, costuming, lighting, make-up, scenery director, and technical director in such areas as the professional theatre, community theatre, recreational theatre, children's theatre, and educational theatre.

See Cerritos College Graduation Requirements.
See State University General Education List.

WELDING

CERTIFICATE OF ACHIEVEMENT

Welding Technology Certificates of Achievement are available under three options: Arc Welding, Gas Tungsten Arc Welding, and Pipe Welding. The basic core courses must be taken for all three certificate options.

WELDING BASIC CORE COURSES

| WELD 39 | Welding Shop Math | 2 |
| WELD 50 | Blue Print Reading for the Welding Trades | 3 |
| WELD 100 | Fundamentals of Welding | 2 |
| WELD 120 | Beginning Arc Welding | 2 |
| WELD 170 | Structural Fabrication | 2 |

or WELD 53 Pipe Layout (2) 13

NOTE: The WELD 39 requirement for a Certificate of Achievement may be met with a satisfactory score on the Math Placement Test.

ARC WELDING OPTION

WELD 200 Intermediate Arc Welding 4
WELD 210L Arc Welding Applications 2
WELD 220 Certification and Licensing for Welders 2

21

NOTE: The student must also pass the L.A. City or AWS certification for structural steel with both the SMAW and FCAW processes. These certifications may be obtained through the Welding Department.

INERT GAS WELDING OPTION

WELD 130 Gas Tungsten Arc Welding Fundamentals 4
WELD 240 Advanced Gas Tungsten Arc Welding Lab (2 labs required) 4
WELD 250L Gas Tungsten Arc Welding Applications (2 labs required) 4

25

PIPE WELDING OPTION

WELD 52 Pipe Welding Fundamentals 4
WELD 54L Advanced Pipe Welding 2
WELD 130 Gas Tungsten Arc Welding Fundamentals 4
WELD 200 Intermediate Arc Welding 4
WELD 210L Arc Welding Applications 2

29

NOTE: The student must also pass the ASME section IX6G performance exam available through the Welding Department.
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
The student must complete one of the certificate options and electives and general education to achieve a minimum of 60 units.

RECOMMENDED ELECTIVES: MTT 100, ENGT 131, WELD 55

CAREER OPPORTUNITIES: Welder, welding inspector, welding technician or fitter, pipe fitter, sheet metal mechanic, and maintenance mechanic. Welders are employed in aircraft industries, shipyards, job shops, pipeline construction, and building construction.

See Cerritos College Graduation Requirements.

WILDLIFE MANAGEMENT AND CONSERVATION TRANSFER PROGRAM

LOWER DIVISION PREPARATION FOR HUMBOLDT STATE UNIVERSITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200 Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201 Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 110 Elementary Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 101 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 150 Precalculus Mathematics</td>
<td>4</td>
</tr>
</tbody>
</table>

See a counselor for option in Conservation Biology/Applied Vertebrate Ecology.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include (1) the above required courses and (2) the Associate in Arts Degree general education requirements.

CAREER OPPORTUNITIES: After transfer to a four-year college or university and completion of the Bachelor’s Degree program, graduates qualify for graduate study and for employment with both public and private agencies in wildlife management and/or fisheries biology.

See Cerritos College Graduation Requirements.

See State University General Education List.

WOMEN’S STUDIES
The A.A. degree in Women’s Studies is a two-year academic program geared for transferring students. Its emphasis is to explore the role of gender as it influences culture, politics, economics and women's history.

The underlying academic objectives of our program are captured in the mission statement: “Women’s Studies believes that the attitudes that shape a society’s treatment of gender influence its economic, social and cultural politics. As such, we hold that women’s rights should be studied in the broader context of human rights. Since we are committed to meeting the needs of all our students, we promote an inclusive curriculum.”

WOMEN’S STUDIES ASSOCIATE IN ARTS DEGREE

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 101 Issues for Women in American Society (Women’s Studies)</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose (2) from the following for a total of (6) units:

Global Emphasis:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100 Cultural Anthropology (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 204 The Anthropology of Sexuality and Gender (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ART 109/HUM 109 Gender and Sexuality in Art (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102 Women in Global Economy (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 236 Studies in Women’s Literature (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 202 Critical Thinking and Argumentative Writing (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>WS 102 Women and Religion (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>WS 205 Sexuality and Gender (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>WS 206 Women in the Global Economy</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose from the following for a minimum of (9) units:

U.S. Emphasis:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 202 Principles of Microeconomics (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 100 Freshman Composition (Women’s Studies)</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 224 Native American Literature (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>HED 103/WS 103 Women, Their Bodies and Health (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 204/WS 204 Women in American History (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>PE 106 Women in Sports (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>PE 160 Personal Self Defense (Women’s Studies)</td>
<td>1</td>
</tr>
<tr>
<td>POL 101 American Political Institutions (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 120 Fundamentals of Interpersonal Communication (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101 Introductory Sociology Principles (Women’s Studies)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110 Marriage and the Family (Women’s Studies)</td>
<td>3</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
To qualify for a degree in Women’s Studies, students must take courses listed above that are designated as having Women’s Studies emphasis and complete all A.A. degree general education requirements for a total of at least 60 units.

WOODWORKING MANUFACTURING TECHNOLOGIES CERTIFICATE OF ACHIEVEMENT PROGRAM

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 101 Introduction to Woodworking</td>
<td>2</td>
</tr>
<tr>
<td>WMT 102 Machine Wood Technology</td>
<td>4</td>
</tr>
<tr>
<td>WMT 103 Machine Wood Technology II</td>
<td>4</td>
</tr>
<tr>
<td>WMT 107 Wood Finishing</td>
<td>3</td>
</tr>
<tr>
<td>WMT 118 Wood Turning</td>
<td>2</td>
</tr>
<tr>
<td>WMT 130 Furniture Design</td>
<td>3</td>
</tr>
<tr>
<td>WMT 151 Introduction to Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 153 Intro to 32mm Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 155 Introduction to Millwork</td>
<td>4</td>
</tr>
</tbody>
</table>
### Curricula, Requirements for Majors, Certificates and Transfer Programs

**WMT 181** Computer Operations for Woodworking 3  
**WMT 201** Woodworking with Hand Tools 4

**Choose from the following for a minimum of (12) units:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 132</td>
<td>Chair Design and Construction</td>
<td>4</td>
</tr>
<tr>
<td>WMT 134</td>
<td>Frame Making</td>
<td>4</td>
</tr>
<tr>
<td>WMT 148</td>
<td>Furniture Making and Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>WMT 153</td>
<td>32MM System of Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 171</td>
<td>Introduction to Boat Building</td>
<td>3</td>
</tr>
<tr>
<td>WMT 202</td>
<td>Advanced Machine Wood Technology</td>
<td>4</td>
</tr>
<tr>
<td>WMT 211</td>
<td>The Workbench Class</td>
<td>4</td>
</tr>
<tr>
<td>WMT 212</td>
<td>Router and Router Tables</td>
<td>4</td>
</tr>
<tr>
<td>WMT 248</td>
<td>Production Furniture Making and Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>WMT 249L</td>
<td>Furniture Manufacturing Specialty</td>
<td>2.5</td>
</tr>
<tr>
<td>WMT 253</td>
<td>Advanced 32MM System of Cabinetmaking</td>
<td>3</td>
</tr>
<tr>
<td>WMT 268</td>
<td>Production Cabinetmaking and Manufacturing</td>
<td>5</td>
</tr>
<tr>
<td>WMT 281</td>
<td>Advanced Computer Operations for Cabinetmaking and Design</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE UNITS 37.5**

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**  
Complete 60 units to include (1) the above Certificate of Achievement requirements, (2) BA 41, (3) the Associate in Art Degree requirements, and (4) electives as needed.  
**RECOMMENDED ELECTIVES:** WMT 211, WMT 212, WMT 268  
**CAREER OPPORTUNITIES:** Upon completion of the program, a student is prepared to design, construct, and produce cabinet and furniture products to industry standards.

See Cerritos College Graduation Requirements.

### WOODWORKING MANUFACTURING TECHNOLOGY CABINETMAKING CERTIFICATE OF ACHIEVEMENT

**WMT BASIC CORE COURSE**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 107</td>
<td>Wood Finishing</td>
<td>3</td>
</tr>
<tr>
<td>WMT 151</td>
<td>Intro to Face Frame Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 153</td>
<td>Intro to 32mm Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 155</td>
<td>Introduction to Millwork</td>
<td>4</td>
</tr>
<tr>
<td>WMT 181</td>
<td>Introduction to Computerized Operations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for Woodworking</td>
<td>3</td>
</tr>
<tr>
<td>WMT 268A,B</td>
<td>or C. Production Cabinetmaking</td>
<td>5</td>
</tr>
</tbody>
</table>

**Choose from the following for a minimum of (8) units:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 250</td>
<td>Intermediate Faceframe Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 251</td>
<td>Advanced Faceframe Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 252</td>
<td>Intermediate 32mm Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 253</td>
<td>Advanced 32mm Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 258</td>
<td>Mantels and Wall Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE UNITS 34**

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**  
Complete 61 units to include (1) the above Certificate of Achievement requirements, (2) the Associate in Art Degree requirements, and (3) electives as needed.  
**RECOMMENDED ELECTIVES:** WMT 233, WMT 244, WMT 248  
**CAREER OPPORTUNITIES:** Upon completion of the program, a student is prepared to design, construct, and produce furniture products to industry standards.

See Cerritos College Graduation Requirements.

### WOODWORKING MANUFACTURING TECHNOLOGY FURNITURE MAKING CERTIFICATE OF ACHIEVEMENT

**WMT BASIC CORE COURSE**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 101</td>
<td>Introduction to Woodworking</td>
<td>3</td>
</tr>
<tr>
<td>WMT 102</td>
<td>Machine Woodworking I</td>
<td>4</td>
</tr>
<tr>
<td>WMT 103</td>
<td>Machine Woodworking II</td>
<td>4</td>
</tr>
<tr>
<td>WMT 107</td>
<td>Wood finishing</td>
<td>3</td>
</tr>
<tr>
<td>WMT 130</td>
<td>Furniture Design</td>
<td>3</td>
</tr>
<tr>
<td>WMT 132</td>
<td>Chair Design &amp; Construction</td>
<td>4</td>
</tr>
<tr>
<td>WMT 201</td>
<td>Woodworking with Hand Tools</td>
<td>4</td>
</tr>
</tbody>
</table>

**Choose from the following for a total of (9) units:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 118</td>
<td>Wood Turning</td>
<td>2</td>
</tr>
<tr>
<td>WMT 137</td>
<td>Outdoor Furniture</td>
<td>2.5</td>
</tr>
<tr>
<td>WMT 202</td>
<td>Adv. Machine Woodworking – Casegoods</td>
<td>4</td>
</tr>
<tr>
<td>WMT 203</td>
<td>Wood Veneering</td>
<td>3</td>
</tr>
<tr>
<td>WMT 233</td>
<td>Morris Chair</td>
<td>4</td>
</tr>
<tr>
<td>WMT 244</td>
<td>Chest of Drawers</td>
<td>4</td>
</tr>
<tr>
<td>WMT 246</td>
<td>Rocking Chair</td>
<td>4</td>
</tr>
<tr>
<td>WMT 248</td>
<td>Production Furniture</td>
<td>4</td>
</tr>
<tr>
<td>WMT 258</td>
<td>Mantels and Wall Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE UNITS 34**

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**  
Complete 61 units to include (1) the above Certificate of Achievement requirements, (2) the Associate in Art Degree requirements, and (3) electives as needed.  
**RECOMMENDED ELECTIVES:** WMT 233, WMT 244, WMT 248  
**CAREER OPPORTUNITIES:** Upon completion of the program, a student is prepared to design, construct, and produce furniture products to industry standards.

See Cerritos College Graduation Requirements.
ZOOLOGY
TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION
FOR THE CALIFORNIA STATE UNIVERSITY
AND THE UNIVERSITY OF CALIFORNIA

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS
FOR SPECIFIC INSTITUTIONS

California State University - Long Beach
(Option within the Biology major)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 200</td>
<td>Principles and Applications of Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>or GEOL 101</td>
<td>The Earth Environment</td>
<td>(4)</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 116</td>
<td>Calculus for Managerial, Biological and Social Science</td>
<td>(4)</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

California State Polytechnic University - Pomona

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

Cal Poly Pomona requires additional lower division courses for the major not offered by Cerritos College.

San Diego State University
(Option within the Biology major)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>and MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

University of California - Santa Barbara

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological and Social Science</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>(4)</td>
</tr>
<tr>
<td>and MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>(4)</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>(4)</td>
</tr>
<tr>
<td>and MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>(4)</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) the above required courses, (2) the Associate in Arts Degree general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Bachelor’s Degree programs are designed to qualify the student for graduate study, entrance to medical, dental or veterinary schools, teaching through secondary schools, employment in Federal and State Civil Service, research laboratories of industrial, pharmaceutical firms, or natural museum work.

See Cerritos College Graduation Requirements.
See State University General Education List.
Announcement of Courses

This section of the catalog provides the course description for all courses approved by the Cerritos College Curriculum Committee. All courses, unless otherwise indicated, apply for credit toward an A.A. Degree in accordance with California Administrative Code, Title V, Section 55805.5.

Courses that do not meet the A.A. Degree requirements are indicated with a statement "(Not degree applicable)" beside the course title. Students are advised to see a counselor for clarification if they have any questions regarding the appropriateness of a course to meet their educational goal.

Please check with your counselor and the department for new developments in curriculum that have not been included in the catalog.

CALIFORNIA ARTICULATION NUMBERS (CAN)

The California Articulation Number System, known as CAN, is a means of identifying comparable courses offered at Cerritos College and other colleges in California. CAN is a system that uses the same prefix and number to identify a course on every participating campus. Each campus has its own number; the CAN is added to denote courses that can be used in lieu of each other at participating colleges. For example, if CAN BUS 2 (BUSA 101) is completed at Cerritos College, that course will be accepted as a course that is designated as CAN BUS 2 at another college campus.

A CAN-identified course assures that a course is not only transferable, but will be used on the receiving campus in the same way as its own CAN-identified course. Over 156 campuses in California are using the CAN System to assist their students in the transfer process. More than 93 Cerritos College courses carry a CAN designation. The CAN designation for Cerritos College courses is listed in the catalog with course descriptions. (See BUSA 101). Additional information is available from a counselor or from the articulation officer in Counseling.

LEARNING COMMUNITY COURSE OFFERINGS

The LC suffix attached to a course number denotes that the course was offered in a Learning Communities format. Courses with an LC suffix are equivalent in content to courses without the LC suffix.
Announcement of Courses

BUSINESS DIVISION
(562) 860-2451 EXT. 2715
Business Accounting
Business Administration
Business Communications
Business Computerized Office Technologies
Business Court Reporting/Computerized Shorthand
Business Finance
Business Paralegal
Business Real Estate
International Studies

HUMANITIES AND SOCIAL SCIENCES DIVISION
(562) 860-2451 EXT. 2752
Administration of Justice
Anthropology
Education/Elementary School Teaching Economics
History
Humanities
Interdisciplinary Studies
Philosophy
Political Science
Psychology
Sociology
Women's Studies

LIBERAL ARTS DIVISION
(562) 860-2451 EXT. 2858
English
English as a Second Language
French
German
Japanese
Reading
Sign Language
Spanish
Speech

SCIENCE, ENGINEERING, AND MATHEMATICS DIVISION
(562) 860-2451 EXT. 2660
Anatomy & Physiology
Astronomy
Biology
Botany
Chemistry
Computer and Information Sciences
Earth Science
Energy
Engineering
Geography
Geology
Mathematics
Microbiology
Physical Science
Physics
Zoology

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ACCOUNTING
SEE BUSA
(Business Accounting/Finance)

ADMINISTRATION OF JUSTICE
(Humanities/Social Sciences Division)
The following courses have been developed by an Area Advisory Committee and are uniform in content with the offerings of most colleges and in conformance with guidelines from the California Community College Chancellor's office.

AJ 71
FIRST AID—ADMINISTRATION OF JUSTICE 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This basic course in emergency first aid and cardiopulmonary resuscitation emphasizes how to recognize and render assistance to the ill or injured where there is an airway obstruction, respiratory arrest, cardiac arrest, severe bleeding, shock, actual or suspected fractures, head injuries, or other life-threatening environmental circumstances. This course meets the California Department of Health requirements as described in the California Administrative Code. A basic Red Cross Certificate will be issued to those students who successfully complete the course.

AJ 91
REPORT WRITING PROCEDURES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course includes the procedures and practices commonly used to gather data and prepare a variety of police records. Emphasis will be placed upon the need to use correct spelling, sentence structure, punctuation and vocabulary in criminal justice reports to meet statistical, legal and prosecution requirements of the criminal justice system.

AJ 101
INTRODUCTION TO ADMINISTRATION OF JUSTICE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides a study of the history and philosophy of the system of administration of criminal justice in the United States. It examines the various sub-systems; role expectations and their interrelationships; theories of crime, punishment, and rehabilitation; ethics; education and training for professionalism in the system; and legal words and phrases as an aid in the communication process.
Transfer Credit: CSU; UC

AJ 102
CONCEPTS OF CRIMINAL LAW (CAN AJ 4)
3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides an introduction to the historical development and philosophy of law and constitutional provisions; as well as crime definitions, classifications of crime, legal research, legal methodology, and concepts of law as a social force. A brief analysis of criminal intent, parties to a crime, elements of crime, corpus delicti, defenses to crimes and an introduction to laws of arrest will also be undertaken in this class.
Transfer Credit: CSU; UC

AJ 103
CRIMINAL PROCEDURES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides a detailed examination of California criminal procedure, including the California court system, jurisdiction and venue, laws of arrest, grand jury proceedings, extradition, pre-trial procedures, conduct of criminal trials, rights of the defendant, post-trial motions and appeals, probation and parole.
Transfer Credit: CSU

AJ 104
CRIMINAL EVIDENCE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course stresses the origin, development, philosophy, and constitutional basis of evidence; constitutional and procedural considerations which affect arrest, search and seizure; kinds and degrees of evidence; the rules governing the admissibility of evidence; and judicial decisions relating to individual rights.
Transfer Credit: CSU

AJ 105
COMMUNITY RELATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides a study of the relationship between law enforcement agencies and the changing communities they serve. The student will compare various approaches to preventing crime and limiting the effects of crime on the individual and the community. The course will also focus on the ethics, politics and the professional image necessary to maintain positive rapport between law enforcement agencies and their communities.
Transfer Credit: CSU; UC

AJ 110
CONCEPTS OF ENFORCEMENT SERVICES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course explores the theories, philosophies and operational concepts of Law Enforcement Field Services, and examines the role expectations of the police field officer. Emphasis is placed upon patrol, traffic and public service responsibilities and their relationship to the total criminal justice system.
Transfer Credit: CSU

AJ 112
INTRODUCTION TO SECURITY MANAGEMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an introduction to private as well as public security management. The historical, philosophical, and legal basis for security services is examined. Emphasis is placed on the role of the security organization and security personnel in modern society, concepts of professionalism and ethics, types and functions of security operations, and career pathways in security management.
Transfer Credit: CSU

AJ 130
TRAFFIC CONTROL AND INVESTIGATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is an in-depth study of the California Vehicle Code, the enforcement of basic traffic laws, selective enforcement, public relations, highway safety engineering, and violator contact. Also included are accident investigation, skid mark analysis, preservation of evidence, hit and run investigation, the intoxicated driver, enforcement methods and psychology, and specialized traffic enforcement units.
Transfer Credit: CSU

AJ 150
INTRODUCTION TO CORRECTIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course introduces the student to the philosophy, history, functions and objectives...
of the system of corrections in the United States. It includes a study of correctional institutions, community-based corrections, parole and probation. An overview of special problems and clientele, custody practices and procedures, and treatment technique will be stressed.

Transfer Credit: CSU

AJ 173 ADMINISTRATIVE OF JUSTICE OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Administration of Justice work experience 173 or 20 hours of employment per week for Administration of Justice work experience 174. The employment must be in a job related to the student's educational goal.

Prerequisite: (1) Concurrent enrollment in the Administration of Justice vocational program with 7 or more UNITS including occupational work experience. (2) Consent of the department.

Occupational Work Experience is a supervised employment program in an approved work station related to the student's declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. Student who are not employed but wish to gain work experience may be placed in a non-paying position if such opportunities are available. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

AJ 180 (Not degree applicable) INTRODUCTION TO PRIVATE AND BUSINESS SECURITY 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course provides students with a presentation of the history and development of security services and inter-relationships with legal processes, including the organization, administration, and management of private security. The operation of security departments, including investigations into internal thefts and customer thefts, public relations, and a comparison of public and private enforcement statutes and procedures is covered. Current requirements for state security personnel and an examination of career opportunities will be discussed. Powers of arrest will be taught, which satisfies the requirements of the State of California under Business and Professions Code Section 7514.1.

AJ 202 SUBSTANTIVE LAW 3 UNITS
Class hours: 3 lecture
Prerequisite: AJ 102 or equivalent with a grade of Credit or "C" or higher.

This course is a study of the substantive criminal laws commonly enforced by municipal, county or state police officers, or other criminal justice investigators. The course provides a complete analysis of both statutory laws and case decisions.

Transfer Credit: CSU

AJ 208 SPECIAL ISSUES IN LAW ENFORCEMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.

This course provides instruction in special issues critical to effective service by law enforcement professionals in modern society. Topics to be covered will include police as professionals; defining and applying values, principles, and moral standards to law enforcement; police and the community; tactical communication; correctly utilizing information systems in police work; and dealing effectively with persons with disabilities.

Transfer Credit: CSU

AJ 210 LEGAL ASPECTS OF SECURITY MANAGEMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.

This course is a study of criminal, tort, contract, and property law relative to security management. Emphasis is placed on laws of arrest, search and seizure, detention, interrogation, and use of force as well as civil liability, property and privacy rights, procurement of information, government regulations and legal consequences of impermissible investigative conduct.

Transfer Credit: CSU

AJ 211 INVESTIGATIVE TECHNIQUES FOR SECURITY MANAGEMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.

This course is an overview of civil as well as criminal investigations in a security management setting. Emphasis is placed on procedures, legalities, and technical aspects of specialized investigations relating to crime, pre-employment screening, sexual harassment, unlawful employment discrimination, accidents, unexplained losses, and other business activities. Proper documentation of a security investigation is also discussed.

Transfer Credit: CSU

AJ 212 PUBLIC SAFETY AND SECURITY ADMINISTRATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course examines the principles and practices of organization administration and management in public safety and security environments (law enforcement, courts, corrections, fire service, environmental safety, and security). Emphasis is placed on planning, budgeting, human resources development, operations, supervision, evaluation, leadership, and ethical decision-making.

Transfer Credit: CSU

AJ 213 PUBLIC SAFETY COMMUNICATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or "C" or higher.

This course deals with all aspects of public safety communications. It will cover the techniques of effectively communicating facts, information, and ideas in a clear and logical manner for a variety of public safety reports, such as crime/violation/incident reports, letters, memoranda, directives, and administrative reports. Students will gain practical experience in interviewing, note taking, report writing, and testifying.

Transfer Credit: CSU

AJ 214 INFORMATION SECURITY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course focuses on procedures, policies, and equipment designed to protect private and government proprietary and intellectual information. Emphasis is placed on physical and technical security, security management responsibilities, and countermeasures designed to protect information collection, storage, processing, and transmission in hard copy, electronic, and Internet mediums.

Transfer Credit: CSU
AJ 220 (CAN AJ 8)  
CRIMINAL INVESTIGATION 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course stresses the fundamentals of investigation: crime scene search and recording, collection and preservation of physical evidence, scientific aids to investigation, modus operandi, sources of information, interviews and interrogation, follow-up investigation and case preparation.  
Transfer Credit: CSU

AJ 221  
NARCOTICS AND VICE CONTROL 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is an introduction to the fields of narcotics and vice investigation. It examines the detection, suppression, apprehension and prosecution of narcotic and vice law violators. Field identification of controlled substances and their effects on the body are stressed. Laws relating to bookmaking, gambling, prostitution and morals offenses are also covered.  
Transfer Credit: CSU

AJ 222  
JUVENILE PROCEDURES 3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course emphasizes the organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures relative to juvenile offenders.  
Transfer Credit: CSU

BUSINESS  
SEE BA  
(Business Administration)

ANATOMY AND PHYSIOLOGY  
(Science/Engineering/Math Division)  
A&P 120  
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY 4 UNITS  
Class hours: 3 lecture/1 quiz/2 lab  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course examines the gross and microscopic anatomy of the human body using a systems approach. The course is designed for pre-nursing students, however, it also meets the needs of other allied health programs and physical education programs.  
Transfer Credit: CSU; UC*  

A&P 130  
HUMAN ANATOMY AND PHYSIOLOGY 5 UNITS  
Class hours: 4 lecture/1 quiz/2 lab  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher, satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or “C” or higher, and CHEM 100 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: CHEM 100 or equivalent with a grade of Credit or “C” or higher.  
This course studies the normal functioning of the organ systems of the human body. Homeostatic imbalances of many systems are examined. The course is designed for pre-nursing students; however, it also meets the needs of the allied health programs and physical education programs.  
Transfer Credit: CSU; UC*  

A&P 150  
INTRODUCTION TO HUMAN ANATOMY 4 UNITS  
Class hours: 3 lecture/3 lab  
Prerequisite: ENGL 100 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course examines the gross and microscopic anatomy of the human body using a systems approach. The course is designed for pre-nursing students, however, it also meets the needs of other allied health programs and physical education programs.  
Transfer Credit: CSU; UC*  
A&P 201  (CAN BIOL SEQ B)(CAN BIOL 12)
HUMAN PHYSIOLOGY  5 UNITS
Class hours: 3 lecture/2 quiz/4 lab
Prerequisite: A&P 200 and CHEM 100 or equivalent with grades of Credit or “C” or higher.
This course involves a detailed study of the function of the human body with an emphasis on the maintenance of homeostasis by the various organ systems. The course will meet the requirements of four year nursing, dental hygiene, physical therapy, paramedical, physical education, and related majors.
Transfer Credit: CSU; UC

ANTHROPOLOGY
(Humanities/Social Sciences Division)

ANTH 100  (CAN ANTH 4)
CULTURAL ANTHROPOLOGY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course traces the social behavior of present societies exploring various cultures on earth. The class will study those societies in terms of culture growth, through a survey of the basic, learned behavior patterns. Thus the class will study a wide range of cultural phenomena, including material culture, social organization, customs, religions, languages, family life, economics, the arts and literature. (This course is not open to students who are currently enrolled in or who have received credit for Anthropology 101.)
Transfer Credit: CSU; UC

ANTH 101
FACES OF CULTURE  2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This is an introductory study of the structures and process of culture. The basic concepts of culture are presented including subsistence patterns, organizing devices, patterns for transmission of culture, economics, political organizations, social control, and culture change. The methods of anthropological research and major theoretical orientations are also described. (This course is not open to students who are currently enrolled in or who have received credit for Anthropology 100.)
Transfer Credit: CSU

ANTH 115  (CAN ANTH 2)
PHYSICAL ANTHROPOLOGY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is about the human past; where we came from and how we got to be the way we are today in terms of both biological and cultural evolution. The topics covered will include: the origin and development of the human species; heredity and population genetics; fossil evidence; and the human’s relation to the rest of the animal kingdom; and modern human diversity and variation.
Transfer Credit: CSU; UC

ANTH 120  (CAN ANTH 6)
INTRODUCTION TO ARCHAEOLOGY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Archaeology is the study of mankind’s past. This course will cover the history of archaeology, and explore the objectives and methods of modern archaeology. Today’s archaeological curiosity is tempered by the scientific method; a combination of sciences in order to get a better grasp on a total understanding of people. This course will explore the world of the archaeologist in order to appreciate the impact that the study of antiquities has had in understanding modern human cultures.
Transfer Credit: CSU; UC

ANTH 170
INTRODUCTION TO LANGUAGE AND CULTURE  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher, and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.
This course introduces the student to the study of language from an anthropological perspective. Methodology, language and cultural meaning, status and language variation, acquisition of language, multilingualism, and language and institutions will be explored within a cross-cultural perspective.
Transfer Course: CSU; UC

ANTH 200
NATIVE PEOPLES OF NORTH AMERICA  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
The course is a study of the origins, culture areas, and sociocultural patterns of the native Americans, north of Mexico. This will include a study of the historic spectrum, from prehistory to contemporary times. Emphasis will be on the culture change after contact with Europeans, and the impact of the Western expansion.
Transfer Credit: CSU; UC

ANTH 201
NATIVE PEOPLES OF CALIFORNIA  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a survey of California Indian cultures including their prehistory and social, political, and religious beliefs. The effects of European, Middle American, and Asian contact, and the resultant adaptations on current life situations of contemporary American native Americans will be examined.
Transfer Credit: CSU; UC

ANTH 202
THE MAYA, INCA AND AZTEC:
ANCIENT CIVILIZATIONS OF THE AMERICAS  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a survey of ancient Indian culture of Northern, Middle and South America, including their prehistory and social, political, and religious beliefs. The impact of European contact and resultant adaptations, as well as current life situations of tribal descendents in contemporary society will be examined.
Transfer Credit: CSU; UC

ANTH 203
THE ANTHROPOLOGY OF MAGIC, WITCHCRAFT,
AND RELIGION  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.
This course is a cross-cultural study of the forms and functions of supernatural beliefs and associated rituals in primarily nonwestern societies. Emphasis is on understanding beliefs and rituals involved in animism, individualistic cults, shamanism, totemism, ancestor worship and witchcraft within their social contexts and within the larger scope of religion and human life.
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ANTH 205
THE ANTHROPOLOGY OF
SEXUALITY AND GENDER  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher, and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.
This course examines the cultural construction of human sexuality and gender in an anthropological framework. Biological and cultural bases for the multiple expressions of sexuality and gender found around the world will be presented. Case studies will include food foraging, horticultural, agricultural, industrial, and post-industrial societies. A central concern is the interaction between subsistence practices, cultural economies, and status in the construction of “normal” and “abnormal” sexualities and genders. This course is not open to students who are enrolled in WS 205 or have received credit in ANTH 204. (Formerly ANTH 204)
 Transfer Credit: CSU

ANTH 250
INTRODUCTION TO FIELD
ARCHAEOLOGY  3 UNITS
Class hours: 1 lecture, 6 lab
Prerequisite: None.
Corequisite: None.
Recommendation: ANTH 120 or equivalent with a grade of Credit or “C” or higher.
This is an introduction to the method of field archaeology including archaeological survey, excavation, mapping, recording of sites, and lab analysis of archaeological artifacts.
 Transfer Credit: CSU

ANTH 251
FIELD TRIPS IN ARCHAEOLOGY  3 UNITS
Class hours: 1 lecture, 6 lab
Prerequisite: None.
Corequisite: None.
Recommendation: ANTH 250 or equivalent with a grade of Credit or “C” or higher.
This is an advanced course in archaeological theory and methods in the field and the laboratory. The emphasis will be on actual site excavation and laboratory analysis. Field trips are required. Fees are required. This course may be taken a maximum of 6 units.
 Transfer Credit: CSU

ARCHITECTURE
( Technology Division)

ARCH 43/44 (Not degree applicable)
ARCHITECTURAL DRAWING
OCCUPATIONAL WORK EXPERIENCE  3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Architectural Drawing work experience 73 or 20 hours of employment per week for Architectural Drawing work experience 74. The employment must be in a job related to the student's educational goal.
Corequisite: (1) Concurrent enrollment in the Architectural Drawing vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Architectural Drawing students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 4 times.

ARCH 110
INTRODUCTION TO ARCHITECTURE
AND ENVIRONMENTAL DESIGN  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides an overview of the architectural profession allowing the student to make an informed career choice. Topics include professional ethics, licensing and educational requirements, career opportunities in related fields, typical organizational structure of architectural firms, legal requirements, and a review of contemporary issues facing the profession.
 Transfer Credit: CSU; UC*
*UC credit limits may apply: Any or all of the following architecture courses – ARCH 110, 112, 122, 212 – combined with ART 120 and ART 121: maximum credit, 18 units.

ARCH 111
ARCHITECTURAL
DRAFTING AND DESIGN I  3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
This course is an introduction to the preparation of architectural working drawings. The course includes drawing conventions, design considerations, and the relationship between different types of architectural drawings, specifications, and construction techniques. Emphasis is placed on residential construction and commercial buildings. The theory of computer-aided drafting is included.
 Transfer Credit: CSU

ARCH 112
HISTORY OF ARCHITECTURE  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a survey of the history of architecture from the birth of civilization to the present. Emphasis is placed upon the understanding of the technological, sociological, aesthetic, and artistic influences which determine our built environment. This course will familiarize students with the different architectural periods as well as their characteristic design elements and significant architects.
 Transfer Credit: CSU; UC*

ARCH 113
BUILDING CODES  4 UNITS
Class hours: 4 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an in-depth study of the statutes and regulations which have been established by law to protect the public health, safety, and welfare. Analysis of the construction of buildings, their use, and accessibility requirements in compliance with applicable laws will be stressed.
 Transfer Credit: CSU

ARCH 121
ARCHITECTURAL
DRAFTING AND DESIGN II  3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ARCH 111 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is a continuation of the study of methods utilized in the preparation of architectural working drawings. This course includes advanced drawing conventions, design considerations, construction specifications, and structural requirements. Analysis of the materials and construction specifications, and structural requirements. Analysis of
the materials and construction details of commercial and industrial buildings is given. Emphasis on the purpose and presentation of working drawings and their relationship to building codes is provided. 

Transfer Credit: CSU

**ARCH 122**
ARCHITECTURAL DELINEATION 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a study of, and laboratory experience in, three-dimensional representations including renderings, perspective drawings, and presentation drawings of architectural projects. Emphasis is on the techniques of various drawing media which will enable the students to express their architectural ideas.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of the following architecture courses - ARCH 110, 112, 122, 212 - combined with ART 120 and ART 121: maximum credit, 18 units.

**ARCH 123**
INTRODUCTION TO 2-D COMPUTER AIDED DRAFTING 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides an introduction to two-dimensional computer aided drafting and design using AutoCAD software. Students will learn the fundamentals of creating and modifying objects, the placing of text and dimensions, working with blocks and hatches, and creating professional quality output. Hands-on exercises will be used to reinforce the functions of AutoCAD. Students who repeat this course will improve skills through further practice and remain current with latest software updates. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

**ARCH 211**
ARCHITECTURAL DESIGN, PROGRAMMING, AND PRESENTATION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ARCH 121 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course covers the development of critical thinking skills in design and programming of the single building. Study and application of the various factors that determine the form of buildings with a special emphasis on graphic presentations, colors, and models are given.

Transfer Credit: CSU

**ARCH 212**
ARCHITECTURAL DESIGN THEORY I 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ARCH 111 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is an introduction to the creative thinking process and its application to basic architectural design theory. Exercises emphasize the development of basic skills and presentation techniques used in the design of simplified architectural projects. Focus on the investigation of the relationship between theoretical concepts, color, space, form, and texture is emphasized.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of the following architecture courses - ARCH 110, 112, 212 - combined with ART 120 and ART 121: maximum credit, 18 units.

**ARCH 213**
INTRODUCTION TO 3-D COMPUTER AIDED DRAFTING 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides an introduction to three-dimensional computer aided drafting and design using AutoCAD, Architectural Desktop and VIZ Render software. Students will learn the fundamentals of creating and modifying three-dimensional objects, the placing of cameras and lights, the creation and application of materials, computer rendering techniques, and creating professional quality output. Hands-on exercises will be used to reinforce the functions of the applicable software. Students who repeat this course will improve skills through further practice and remain current with latest software updates. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

**ARCH 221**
ARCHITECTURAL CAD WORKING DRAWINGS 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.

**ARCH 222**
ARCHITECTURAL DESIGN THEORY II 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ARCH 212 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course includes the continued development of the creative thinking process and its application to advanced architectural design theory, focusing on the synthesis of the relationship between theoretical concepts, space, color form, and texture. The emphasis of the course is on presentation graphics, models, and the development of a portfolio of student work. This course is particularly applicable to students wishing to transfer into a professional architectural degree program.

Transfer Credit: CSU

**ARCH 223**
ARCHITECTURAL CAD 3-D BUILDING MODELING 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: ARCH 123 or ENGT 138 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course provides an introduction to the production of parametric three-dimensional building models and working drawings using Revit software. Students will learn the fundamentals of creating and modifying three-dimensional topography and building mass objects, parametric building walls with floor and roof slabs, creating floor and reflected
ceiling plans, generating building elevations and sections, annotating and documenting the drawing, and creating professional quality renderings. Hands-on exercises will be used to reinforce the functions of Revit.

Announcement of Courses

ART AND DESIGN

(Fine Arts/Communications Division)

ART 100
INTRODUCTION TO WORLD ART 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides the basic introduction to oriental brush, ink and colors. The student learns concepts in design and composition, as well as the philosophy that is the basis of Chinese brush painting. Subjects include traditional floral and animal studies, and abstract expressions. Techniques for mounting of art work are also studied. This course may be taken a maximum of 2 times.

ART 101
APPRECIATION AND HISTORY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an overview of world art from prehistoric times to the present. It is designed to be of interest and value to the art and non-art major alike.

ART 102
APPRECIATION AND HISTORY 3 UNITS (CAN ART 4)
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Credit or “C” or higher.
This course covers art and its role in human affairs from the Renaissance to the Rococo, with an emphasis on giving students an understanding and appreciation of all of the visual arts. It is designed to be of interest and value to the art and non-art major alike.

ART 103
MODERN AND CONTEMPORARY APPRECIATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Credit or “C” or higher.
This course covers art and its role in human affairs from the Neoclassical period to the present with an emphasis on giving students an understanding and appreciation of all of the visual arts. It is designed to be of interest and value to the art and non-art major alike.

ART 104
AFRICAN ART HISTORY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Credit or “C” or higher.
This course is an introduction to the history of African art. Students will explore the background, aesthetics, styles and iconography of Africa through slide presentation, in-class discussions and assigned readings.

ART 105
APPRECIATION 3 UNITS (CAN ART 2)
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Credit or “C” or higher.
This course covers art and its role in human affairs from Prehistory to Gothic, with an emphasis on giving students an understanding and appreciation of all of the visual arts. It is designed to be of interest and value to the art and non-art major alike.

ART 106
MEXICAN ART 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Credit or “C” or higher.
This course is a survey of Mexican art history, from Pre-Colombian to Chicano art. It will include an examination of the cultural, socio-political and religious influences that have shaped the art of Mexico. The course will consist of lecture, slide presentation, discussion, and analysis of representative art of the various periods.

ART 107
ASIAN ART HISTORY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Credit or “C” or higher.
This course surveys the arts of India, Thailand, Cambodia, Vietnam, Java, China, Korea and Japan. Architecture, painting, sculpture, printmaking and other arts are examined within their philosophical, religious, intellectual and social contexts.

ART 108
BLACK IMAGES IN POPULAR CULTURE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Credit or “C” or higher.
This course surveys the depiction and development of images of Blacks and the stereotypes created in Western culture. The various means artists have used to counter those stereotypes by using techniques of resistance and counter narratives will be examined. Students will study fine art, comic books, comic strips, cartoons, advertising, literature, music, dance, theatre, cinema, broadcasting and television. Writing a research paper is a significant component of the course. Reading of literature theory and criticism is required. This course is not open to students who are enrolled in or who have received credit in HUM 108.

ART 109
SEXUALITY IN ART 3 UNITS
Class hours: 3 lecture
Prerequisite: Student must be at least 18 years of age or have parental consent in order to take this course.
Corequisite: None.
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Credit or “C” or higher.
This course will investigate the relationship between gender and sexuality through and examination of visual art, cinema, television, video, and advertising. Close attention will be given to how popular and artistic cultures shape identity and representation. Writing a research paper is a significant component of the course. College level reading is required.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course is not open to students who are enrolled in or who have received credit in HUM 109.
Transfer Credit: CSU; UC

ART 110 (CAN ART 8)
FREEHAND DRAWING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This is a beginning course in the history and appreciation, theory, and practice of representational and non-objective drawing technique, linear perspective, composition, and presentation. Lectures will include the historical development and appreciation of drawing from Western and non-Western cultures.
Transfer Credit: CSU; UC

ART 111 INTERMEDIATE
FREEHAND DRAWING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of the hands-on studio experience of ART 110. The course will explore abstraction, cubism and conceptual ideas based on music, poetry and film that have affected art and culture. It will also synthesize the traditional concepts of drawing with the contemporary approaches to drawing since the 20th century. Students will analyze cultural influences, themes and movements in art history from the Renaissance to our current avant-garde and relate them to the creative process of drawing. The course is designed to help identify and enhance each student’s individual sensibilities.
Transfer Credit: CSU; UC

ART 112 (CAN ART 24)
LIFE DRAWING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher. Student must be at least 18 years of age or have parental consent in order to take this course.
This course teaches how to draw the live model. Students learn the language and the elements of drawing, anatomy, and the perspective of the human form in space. Demonstrations are given on a variety of approaches to drawing the figure. Students develop technique with an appreciation for the inherent beauty of the material they are working with charcoal, conte, colored pastel and watercolor.
Transfer Credit: CSU; UC

ART 114
STORYBOARD AND GRAPHIC NOVEL ILLUSTRATION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
This course looks at visual storytelling techniques through graphic novels, storyboards, and comic books. Students will learn to effectively communicate a story through pen and ink techniques, draw a pre-visualization for a live-action production, or draw a pre-existing short story. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 115L PRINTMAKING LAB 1 UNIT
Class hours: 3 lab
Corequisite: Concurrent enrollment in or prior completion of ART 116 or ART 117 with a grade of Credit or “C” or higher.
This is a lab course intended to complement other courses in the Printmaking curriculum. It is designed to give practical experience in working with the techniques of relief printing, intaglio (etching, aquatint, drypoint, softground, viscosity, and photoetching), screenprinting and photo-screenprinting, calligraphy, embossing, and monotype. The course will increase the skill and creative output of the student in areas of his/her choice. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

ART 116 BEGINNING PRINTMAKING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This is an introductory course in the theory and practice of printmaking that will expose the student to the historical development and contemporary practice of printmaking as an original art form. The student will explore the processes of relief printmaking (linocut and woodcut) intaglio printmaking (etching, drypoint, and softground), and screenprinting and their contemporary interaction with photographics and digital imagemaking through application and appreciation. Recommended for drawing and painting majors, graphic design majors, and photography majors.
Transfer Credit: CSU; UC

ART 117 INTERMEDIATE PRINTMAKING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 116 or equivalent with a grade of Credit or “C” or higher.
This is a course designed to further the student’s investigation into the aesthetics and techniques of screenprinting, intaglio (aquatint etching softground, whiteground, sugarlift), multiple color relief printmaking, and calligraphy. Related photographics and digital imagemaking techniques will be studied and applied further, such as photo-screenprinting, photo-etching, halftoning, posterization technique, and use of the enlarger, digital camera, flatbed scanner, and slide scanner. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 120 TWO-DIMENSIONAL DESIGN 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
ART 120 is an intensive studio course that introduces the practical and the conceptual aspects of two-dimensional design. Working in both color and black and white, students will use the materials, tools, and techniques of design to create a portfolio. They will study the aesthetic functions and formal concerns of line, shape, value, texture, and surface and develop the understanding and vocabulary of the two-dimensional design.
Transfer Credit: CSU; UC

ART 121 THREE-DIMENSIONAL DESIGN 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 120 or equivalent with a grade of Credit or “C” or higher.
This course will serve as an introduction to organization and problem solving in three-dimensions with an emphasis on formal concerns. It will also serve as an introduction to the materials, techniques and tools used in the making of three-dimensional forms. This course will emphasize the use and comprehension of the vocabulary of three-dimensional design and its application to the visual image.
Transfer Credit: CSU; UC

ART 130A FUNDAMENTALS OF PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This course is an introduction to the material and creative processes of painting. Students learn how to think about pictorial space, how to structure composition, the characteristics and handling of paint, and the application of color theory. Painting is primarily from still life, with the students’ personal interpretation and use of imagination encouraged.
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ART 130B
FUNDAMENTALS OF PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 130A or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of ART 130A. The student works more deliberately with the expressive properties of color, value, and the organization of pictorial space. A variety of still life painting problems provide the student opportunity to discover his or her strengths and artistic persuasion. Lecture and critiques open the student to a deeper sensibility as well as an increased theoretical understanding of painting.
Transfer Credit: CSU; UC

ART 133A
WATERCOLOR PAINTING 3 UNITS
Class hours: 1 lecture/5 studio
Prerequisite: None.
This introductory course pursues the study of the various techniques and methods of watercolor as used by artists today: transparent, opaque, dry brush, glazing, mixed media, egg tempera, air brush, and colored pencils. Emphasis is placed on traditional, modern, and oriental approaches as relative to other art studies, such as drawing, design, calligraphy, oil painting, and history. The student will be directed towards developing skills in the painting of still life, landscape, figure, portrait, and abstraction.
Transfer Credit: CSU; UC

ART 133B
WATERCOLOR PAINTING 3 UNITS
Class hours: 1 lecture/5 studio
Prerequisite: ART 133A or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of the procedures and studies begun in ART 133A. Emphasis is on acquiring further skills and experiences in various watercolor techniques and practices. Students are expected to learn how to properly mat, glass, and frame paintings for exhibition and display.
Transfer Credit: CSU; UC

ART 134
WATERCOLOR
LANDSCAPE PAINTING I 2 UNITS
Class hours: 1 lecture/3 studio
Prerequisite: None.
This course emphasizes the traditional use of materials and techniques related to watercolor painting. The course will analyze color theory, various paint applications, light logic and perspective as they relate specifically to watercolor and nature with landscape as a major focus of subject matter. Lecture and critiques open the student to a deeper sensibility as well as an increased theoretical understanding of painting.
Transfer Credit: CSU; UC

ART 135
WATERCOLOR
LANDSCAPE PAINTING II 2 UNITS
Class hours: 1 lecture/3 studio
Prerequisite: None.
Recommendation: ART 134 or equivalent with a grade of Credit or "C" or higher.
This course emphasizes new methods and technical approaches to watercolor painting. The course will analyze color theory, various paint applications, light logic and perspective as they relate specifically to watercolor and nature with landscape as a major focus of subject matter.
Beginning with the traditional use of materials and techniques related to watercolor painting, the course is designed to further develop the students’ understanding of techniques and personal investigation of watercolor and the landscape.
Transfer Credit: CSU; UC

ART 136
PAINTING FOR ART MAJORS 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or "C" or higher.
Recommendation: ART 120 or equivalent with a grade of Credit or "C" or higher.
This is a course in painting designed specifically for art majors. Topics include use and manipulation of painting materials and color; depicting mood and sensation; expression of form, edge, and negative space; and devices in composition. Projects include creative thinking as applied to non-objective painting, formal invention, and symbolic imagery. Knowledge of art history is expanded through gallery and museum visits and assigned reading. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 137
JEWELRY/METALSMITHING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 144 or equivalent with a grade of Credit or "C" or higher.
This is the second course in a sequential program covering the design and technical processes of jewelry and metalsmithing. Emphasis will be placed on the continued development of skills in designing and fabrication of jewelry and metalsmithing. The techniques and projects covered are forging/smiting, hollow constructions and casting processes. The study of the history and culture of jewelry and body ornamentation is continued through audio/visual lectures and museum and gallery visits. This class may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 138
INTRODUCTION TO CERAMICS 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This course is designed as an introduction to the ideas, techniques, history, and traditional of the art of ceramics.
Transfer Credit: CSU; UC

ART 139
CERAMICS – BEGINNING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 150 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course builds on techniques learned in ART 150, Introduction to Ceramics. Emphasis is on the use of the potter’s wheel. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 140
WHEELTHROWING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 150 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course builds on techniques learned in ART 150, Introduction to Ceramics. Emphasis is on the use of the potter’s wheel. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 141
CERAMICS – BEGINNING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 150 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course builds on techniques learned in ART 150, Introduction to Ceramics. Emphasis is on the use of the potter’s wheel. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 142
CERAMICS – BEGINNING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 150 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course builds on techniques learned in ART 150, Introduction to Ceramics. Emphasis is on the use of the potter’s wheel. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 143
CERAMICS – BEGINNING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 150 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course builds on techniques learned in ART 150, Introduction to Ceramics. Emphasis is on the use of the potter’s wheel. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 144
JEWELRY CASTING AND MOLDS 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 144 or equivalent with a grade of Credit or "C" or higher.
This is the second course in a sequential program covering the design and technical processes of jewelry and metalsmithing. Emphasis will be placed on the continued development of skills in designing and fabrication of jewelry and metalsmithing. The techniques and projects covered are forging/smiting, hollow constructions and casting processes. The study of the history and culture of jewelry and body ornamentation is continued through audio/visual lectures and museum and gallery visits. This class may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 145
JEWELRY CASTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 144 or equivalent with a grade of Credit or "C" or higher.
This is the second course in a sequential program covering the design and technical processes of jewelry and metalsmithing. Emphasis will be placed on the continued development of skills in designing and fabrication of jewelry and metalsmithing. The techniques and projects covered are forging/smiting, hollow constructions and casting processes. The study of the history and culture of jewelry and body ornamentation is continued through audio/visual lectures and museum and gallery visits. This class may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 146
JEWELRY CASTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 144 or equivalent with a grade of Credit or "C" or higher.
This is the second course in a sequential program covering the design and technical processes of jewelry and metalsmithing. Emphasis will be placed on the continued development of skills in designing and fabrication of jewelry and metalsmithing. The techniques and projects covered are forging/smiting, hollow constructions and casting processes. The study of the history and culture of jewelry and body ornamentation is continued through audio/visual lectures and museum and gallery visits. This class may be taken a maximum of 2 times.
Transfer Credit: CSU
ART 153
CERAMICS-INTERMEDIATE
WHEELTHROWING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 151 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course builds on techniques learned in ART 151, Ceramics-Beginning Wheelthrowing. Emphasis is on the use of the potter's wheel. Glaze technology is introduced. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 154
CERAMICS-INTERMEDIATE
HANDBUILDING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 152 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course builds on techniques learned in ART 152, Ceramics-Beginning Handbuilding. Emphasis is on the use of complex hand-forming techniques. Glaze technology is introduced. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 155
BEGINNING
CERAMIC SCULPTURE 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 150 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course is designed as an introduction to the ideas, techniques, and tradition of the art of ceramic sculpture. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 156L
CERAMICS LAB 1 UNIT
Class hours: 4 lab
Open entry/open exit
Prerequisite: None.
Corequisite: One or more of the following courses: ART 150, ART 151, ART 152, ART 155, ART 252, ART 253 or ART 255.
Recommendation: None.
This lab course is intended to complement the other courses in the ceramics curriculum. It is designed to give practical experience in the techniques and technology of ceramics, including handbuilding, wheel-throwing, sculpture, surface treatments, and glazing. The course will improve the skills and creativity of students enrolled in the ceramics courses.
Transfer Credit: CSU; UC

ART 160
LIFE SCULPTURE 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a course designed to introduce the student to the art and technique of sculpting the human figure from observation of a live model. Instruction will include structural analysis of the human figure, human anatomy, the use of the elements and principles of sculpture, and techniques of sculpting the figure in modeling materials. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

ART 162
INTRODUCTION TO SCULPTURE 3 UNITS (CAN ART 12)
Class hours: 2 lecture/4 studio
Prerequisite: None.
Corequisite: None.
Recommendation: ART 121 or equivalent with a grade of Credit or "C" or higher.
This course is designed as an introduction to the ideas, techniques, and materials involved in the making of sculptural forms.
Transfer Credit: CSU; UC

ART 163
THE TECHNIQUES OF SCULPTURE 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
Corequisite: None.
Recommendation: ART 162 or equivalent with a grade of Credit or "C" or higher strongly recommended.
This course is a continuation of ART 162, Sculpture I. New ideas, techniques, and materials for making sculpture are introduced. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 170A
BEGINNING
WOOD SCULPTURE I 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course covers the selection, preparation and use of hand tools as related to wood sculpture. The student investigates the properties and characteristics of wood as a basic three-dimensional design medium. Techniques such as knife carving, gouging, chiseling, rasping, texturing, sanding and finishing will be covered. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 170B
BEGINNING
WOOD SCULPTURE II 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: ART 170A or equivalent with a grade of Credit or "C" or higher.
This course covers the use of hand tools and power equipment as related to creating wood objects. The designing of both traditional and contemporary wood-sculpture items will be studied. The areas of lamination, fabrication, and subtractive techniques in advanced projects will be learned. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 171
OCCUPATIONAL WORK EXPERIENCE IN ART 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Occupational Work Experience in Art, in a declared Art major. One unit of Occupational Work Experience in Art requires 60 non-paid hours or 75 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the students/workers, the college, and the employers/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their approved projects are completed. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

ART 180
CALLIGRAPHY I 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
This foundation course explores the history, theory, and techniques which shape letterforms, past and present. Emphasis...
will be on developing skill and knowledge through the historical study of calligraphy and the manipulation of tools and materials. The Roman style will be studied through a modular approach beginning with linear forms, then broad pen sans serif forms, and finally Humanist Bookhand. An appreciation for color, design, and the aesthetic qualities of letter forms will be stressed in their contemporary usage. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**ART 181 CALLIGRAPHY II 3 UNITS**

Class hours: 2 lecture/4 studio
Prerequisite: ART 180 or equivalent with a grade of Credit or “C” or higher.
This course focuses on the development of the Italic letterforms in addition to the continued study of the historical development of letterforms, past and present. Emphasis will be on the continued in-depth development and refinement of calligraphic skills and knowledge. Various styles of Italic will be studied in conjunction with a review of the Roman styles of the previous semester. Calligraphy II will continue to stress an appreciation for the color, design, and aesthetic properties of quality letterforms in their contemporary usage. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**ART 182A LETTERING AND TYPOGRAPHY 3 UNITS**

Class hours: 2 lecture/4 studio
Prerequisite: None.
The exploration of lettering and typography, its creation, use and function in printing, packaging, publishing, and advertising constitute the basis for this course. Skills will be developed through practical studio exercises using both hand skills and computer typography. The classification of type styles will be learned and the basic elements of typography will be explored.

**Transfer Credit: CSU**

**ART 182B LETTERING AND TYPOGRAPHY II 3 UNITS**

Class hours: 2 lecture/4 studio
Prerequisite: ART 182A or equivalent with a grade of Credit or “C” or higher.
The design and application of letterforms requiring increased technical skills and intensive experience in the use of current and computer graphics programs provide the basis for this second semester of lettering and typography. Topics include illustrative lettering, experimental typography, computer-designed letterforms, digital typography and type design.

**Transfer Credit: CSU**

**ART 183 INTRODUCTION TO ILLUSTRATION 3 UNITS**

Class hours: 2 lecture/4 lab
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
In this course students learn the principles and practices of illustration through the examination of artists and illustrators as well as the understanding of materials, techniques, and practical assignments faced by the illustrator. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**ART 183A COMMERCIAL BRUSH LETTERING 1 UNIT**

Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course explores the history, theory and techniques of brush lettering with an emphasis on designing for commercial applications. The class will focus on hand lettering techniques with manipulation of traditional flat and pointed brushes. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**ART 183B COPPERPLATE CALLIGRAPHY 1 UNIT**

Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This foundational course explores the history, theory, and techniques which shape letterforms, past and present. Emphasis will be on developing skill and knowledge through the historical study of calligraphy and the manipulation of tools and materials. The Copperplate style will be studied through a modular approach beginning with linear forms, then flexible pointed pen forms. An appreciation for color, design, and the aesthetic qualities of letterforms will be stressed in their contemporary usage. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**ART 184 GRAPHIC DESIGN I 3 UNITS**

Class hours: 2 lecture/4 studio
Prerequisite: ART 182A or equivalent with a grade of Credit or “C” or higher.

Fundamental studies are conducted in the history, theories, techniques, and practices of graphic design. Emphasis will be placed on the application of basic design principles to graphic design problems in visual communications. Design solutions will explore the potential of layout and design, utilizing illustration, photography, typography, and symbology.

**Transfer Credit: CSU**

**ART 185 RENDERING I 3 UNITS**

Class hours: 2 lecture/4 studio
Prerequisite: ART 110 or equivalent with a grade of Credit or “C” or higher.
Beginning techniques in the delineation of representational subject matter are explored. Emphasis is on sharp focus drawing using black and white media such as pencils, ink, felt tips, as well as colored felt tips and Prismacolor pencils. This course is important to those interested in graphic design, industrial design, and technical illustration.

**Transfer Credit: CSU**

**ART 186 COMPUTER GRAPHICS IN ART AND DESIGN 3 UNITS**

Class hours: 2 lecture/4 studio
Prerequisite: None.
This course covers the basic concepts and techniques of computer graphics. The principles of art and design are taught in a studio setting emphasizing hands-on experience. Students create original illustrations using vector-based graphics software.

**Transfer Credit: CSU**

**ART 188 DESIGN FOR DESKTOP PUBLISHING 3 UNITS**

Class hours: 2 lecture/4 studio
Prerequisite: None.
This course covers page design and layout systems for desktop publishing. The principles and terminology of typography are stressed. The scanning of graphic material such as illustrations and photographs will be covered with regard to the requirements of the publishing industry. Hands-on experience is emphasized. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**ART 189L COMPUTER GRAPHICS LAB 1 UNIT**

Class hours: 3 lab
Prerequisite: None.
Corequisite: One of the following courses: ART 182A, ART 182B, ART 184, ART 186, ART 188, ART 192, ART 195, ART 196, ART 284, PHOT 110 or PHOT 112.
ART 190
ANIMATION PRINCIPLES 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course demonstrates the theory of animation principles through practical exercises in hand-drawn cel animation. Students explore the use of animation techniques in contemporary character-based animated narratives. Students will apply concepts of timing, weight, personality and balance to hand-drawn animation projects. This class may be taken for a maximum of 2 times.
 Transfer Credit: CSU

ART 191A
3D COMPUTER ANIMATION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course serves as an introduction to 3D computer animation by taking animation principles developed in classical animation and applying those techniques using computer animation software. Particular emphasis will be placed on character modeling, anthropomorphic techniques, and character modeling. Topics will also include lighting composition, and rendering. Students will animate and render a short narrative as the final project. This course may be taken for a maximum of 2 times.
 Transfer Credit: CSU

ART 191B
3D COMPUTER ANIMATION PROJECT 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ART 191A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course will provide students with the opportunity to continue their exploration of 3D computer animation by writing, modeling, storyboarding, and animating an original animation short. Topics will include storyboard creation, shot development, editing, and sound design. This course may be taken a maximum of 2 times.
 Transfer Credit: CSU

ART 192
PHOTOSHOP/DIGITAL IMAGING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers image editing of photographic media for commercial art direction using Adobe Photoshop and other image editing programs. Topics include scanning basics, image conversion, painting and editing tools, manipulation selections, photographic compositing, masks and layers, color corrections and making color separations.
 Transfer Credit: CSU

ART 192B
ADVANCED PHOTOSHOP 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers advanced image editing of photographic media for commercial art direction using Adobe Photoshop. Emphasis is on more advanced Photoshop techniques as well as more involved design projects that will further enhance the student’s portfolio. This course may be taken a maximum of 2 times.
 Transfer Credit: CSU

ART 193
MOTION PICTURE EDITING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course serves as an introduction to motion picture editing by taking students through the history of editing and analyzing specific techniques using examples of significant work. Students will apply their knowledge of editing techniques through exercises on non-linear editing tools where they will edit their own versions of scenes from common footage.
 Transfer Credit: CSU

ART 194
MULTIMEDIA DESIGN 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
This course acquaints students with the use of multimedia programs and the tools they provide to create full featured interactive multimedia prototypes, applications, and presentations for commercial distribution.
 Class work and lab assignments provide hands-on experience for the students. This course may be taken a maximum of 2 times.
 Transfer Credit: CSU

ART 194A
ADVANCED FINAL CUT PRO 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course takes students through the more complex features of Final Cut Pro software to gain a better understanding of compositing and effects for multimedia and animation. This course may be taken a maximum of 2 times.
 Transfer Credit: CSU

ART 195
3D MODELING FOR ANIMATION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
This course is an overview of interactive three-dimensional modeling and rendering techniques on the Macintosh. The course involves assignments emphasizing understanding of modeling and rendering software tools, and animation concepts. This course may be taken a maximum of 2 times.
 Transfer Credit: CSU

ART 196
WEB DESIGN WITH FLASH AND DREAMWEAVER 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 205 or equivalent with a grade of Credit or “C” or higher.
The course introduces students to the principles and design skills essential to designing web pages. The students will use web page creation software and the tools they provide to create full-featured-interactive web sites. This class may be taken for a maximum of 2 times.
 Transfer Credit: CSU

ART 197
DIGITAL PAINTING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a bridge connecting conventional drawing and painting tools and techniques with their computer counterparts. Specifically, this course explores color theory, art history and conventional media, and demonstrates how to translate foundational art theory using digital painting tools. It addresses the
Announcement of Courses

ART 198
MOTION GRAPHICS 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course addresses the process of communication through typographic animation and visual effects. Emphasis is placed on creating emotional expression and identity through composites of video and text. Topics include the combination of on-screen text and imagery in feature films, broadcast applications, video poetry, and fine art videos. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 213
INTERMEDIATE LIFE DRAWING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 112 or equivalent with a grade of Credit or “C” or higher. Student must be at least 18 years of age or have parental consent in order to take this course.
In this course students continue the process of learning to draw the live model. Students practice exploring the rhythm and design inherent in the human figure, seeing and understanding the space a form occupies, understanding the kinesthetics of anatomy, and learning the economy of good drawing technique. The history and evolution of drawing as an art form and contemporary purposes in figure drawing are discussed in lectures. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 214
SPECIAL STUDIES IN LIFE DRAWING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 213 or equivalent with a grade of Credit or “C” or higher.
This course offers advanced work in figure drawing. Emphasis is placed on the student's development of personal style. The pictorial space of the drawing is given the same importance as in a painting, and the student seeks to elevate the classroom sketch to a well designed and effective work of art. The course considers the relationship between the student's intentions in drawing to his or her work in other media, such as painting or sculpture. Focus is placed on the personal and creative aspects of drawing, how and what a drawing communicates, developing an advanced technique, and using professional materials. This course may be repeated for a maximum of 2 times.
Transfer Credit: CSU; UC

ART 217L
ADVANCED SCREENPRINTING/ADVANCED ETCHING LAB 1 UNIT
Class hours: 3 lab
Prerequisite: None.
Corequisite: Concurrent enrollment in or prior completion of ART 218 or ART 219 or equivalent with a grade of Credit or “C” or higher.
Recommendation: None.
This is a lab course intended to complement advanced courses in the Printmaking curriculum. It is designed to give practical experience in working with the techniques of relief printing, intaglio (etching, aquatint, drypoint, softground, viscosity, and photoetching), screenprinting and photo-screenprinting, collagraphy, embossing, monotype and digital imagemaking in conjunction with the traditional printmaking techniques. The course will increase the skill and creative output of the student in areas of his/her choice. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

ART 218
SCREENPRINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 117 or equivalent with a grade of Credit or “C” or higher.
This course emphasizes advanced practice, technique, and historical knowledge of screenprinting as a fine art medium. An important feature of the course will be the study of the materials, stencils, films, blockouts, photomechanical processes, and inks of the screenprinting process. Photographic and digital image-making techniques related to photoscreenprinting will be studied and applied further, including use of the enlarger, stat camera, digital camera, flatbed scanner, and slide scanner. Instruction will cover serigraphic flatbed printing as well as use of the rotary press for textile printing. Students will be required to complete particular aesthetic and technical assignments through their prints. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 219
ADVANCED ETCHING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 117 or equivalent with a grade of Credit or “C” or higher.
This course is designed to explore the artistic possibilities and various techniques of advanced etching, including grounds, aquatints, photoetching, multiple plate color etching, viscosity printing, collagraphy, and embossing. Related digital imaging and photographic techniques will be presented for integration into the etching process. Students will be required to deal with particular aesthetic issues and techniques. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 231
INTERMEDIATE PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 130B or equivalent with a grade of Credit or “C” or higher.
This course is designed for students who want a deeper understanding of painting: its history, theories, creative purposes, and technical skills. Through lectures, discussions, and studio work, students discover, articulate, and bring into being their own artistic identity and style. Practical assistance is given on an individual basis. Emphasis is placed on the student's progression from idea to technical means and visual accomplishment. Students may initiate their own painting projects, or use what subject matter is presented to the class. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 232
PORTRAITURE: DRAWING/PAINTING THE HEAD 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 112 or equivalent with a grade of Credit or “C” or higher.
This course is designed to explore the self-portrait, all will be discussed and explored. Live models will pose. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 237
LIFE PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 112 or equivalent with a grade of Credit or “C” or higher. Student must be at least 18 years of age or have parental consent in order to take this course.
This is a painting and lecture course which focuses on the live model as subject matter. The history and philosophy of the figure in art are discussed. Symbolic, expressionistic,
allegorical, fantastic, narrative, and abstract styles are surveyed. Drawing and painting techniques and materials are explained. Individual and group critiques are utilized. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

ART 238
SPECIAL STUDIES IN PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 136 or ART 237 or equivalent with a grade of Credit or "C" or higher.
This is an advanced course designed for individualized study with the experienced painter. The student is expected to research the historical and contemporary trends in art and the criticism which relate to his or her work. Discussion centers on how the student's work communicates specific meaning and functions within the art world. Projects may be in traditional, transitional, or new forms of painting. This course may be taken a maximum of 2 times.
Transfer Credit: CSU, UC credit determined after admission

ART 239
PORTRAIT PAINTING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 130A or ART 232, or ART 237 or equivalent with a grade of Credit or "C" or higher. Student must be at least 18 years of age or have parental consent in order to take this course.
This is a course in the history, theories, techniques, and practice of portrait painting. Creative imagination, color, space, and pictorial structure are included in the study of the portrait. Live models will be used. The student has the option of working in any drawing or painting medium. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 246
JEWELRY DESIGN FABRICATION 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 145 or equivalent with a grade of Credit or "C" or higher.
This is the third course in a sequential program covering the design and technical processes of jewelry and metalsmithing. The techniques and projects covered are fabricating a die-formed container, stone setting, mold making, and lost wax casting of multiples. The study of the history and culture of jewelry and body ornamentation is continued through audio/visual lectures and museum and gallery visits. This class may be taken for a maximum of 2 times.
Transfer Credit: CSU

ART 248
HOLLOW FORMING
JEWELRY PROCESSES 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 246 or equivalent with a grade of Credit or "C" or higher.
This is the fourth and most advanced course in a sequential program covering the design and technical processes of jewelry and metalsmithing. The techniques and projects covered in this course include designing a suite/set of wearable objects and a set of flatware. Specialized advanced techniques and processes will be taught to match the student's specific artistic objectives and projects. The study of the history and culture of jewelry and metalsmithing is continued through audio/visual lectures and museum, gallery, commercial and industrial site visits. This course may be taken for a maximum of 2 times.
Transfer Credit: CSU

ART 252
CERAMICS - FORM AND TECHNIQUE 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 151 or ART 152 or equivalent with a grade of Credit or "C" or higher.
This course continues the exploration and development of forms and techniques encountered in ART 151 and ART 152. The student is expected to determine some of the projects for the semester's work. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 253
CERAMICS – FORM AND CONTENT 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 252 or equivalent with a grade of Credit or "C" or higher.
This course is designed for individualized study by the ceramist with at least three semesters of prior experience at the college level. Students will be expected to write a proposal for work to be accomplished during the semester. Clay technology and kiln firing technique will be introduced. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 255
INTERMEDIATE CERAMIC SCULPTURE 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 155 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of ART 155. New ideas, techniques and approaches to making ceramic sculpture are introduced. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 264
SCULPTURE - STONECARVING 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: None.
Corequisite: None.
Recommendation: ART 163 or equivalent with a grade of Credit or "C" or higher strongly recommended.
This course is designed to extend the student's knowledge and skill in the specific discipline of subtractive sculpture. The student will learn how to make sculpture by traditional stonecarving techniques. This course may be taken a maximum of 3 times.
Transfer Credit: CSU; UC

ART 284
GRAPHIC DESIGN II 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 184 or equivalent with a grade of Credit or "C" or higher.
Continued studies in the theories, techniques, and practices of graphic design for visual communications are undertaken. Emphasis is on more advanced techniques and studies of problems in visual communications. Design solutions will be taken from the initial concept through refinement to camera-ready art for print production. Students acquire expertise in the use of process cameras, phototypesetters, and additional equipment.
Transfer Credit: CSU

ART 285
RENDERING II 3 UNITS
Class hours: 2 lecture/4 studio
Prerequisite: ART 185 or equivalent with a grade of Credit or "C" or higher.
Experimental and advanced techniques in the delineation of representational subject matter emphasize the use of color in creating sharp focus drawing. Pencils, colored inks, felt tips, watercolor, gouache, and acrylic will be used. This class is important for those interested in graphic design, industrial design, and technical illustration.
Transfer Credit: CSU

ART 287A
LETTER ARTS 2 UNITS
Class hours: 1 lecture/3 studio
Prerequisite: ART 181 or equivalent with a grade of Credit or "C" or higher.
This intermediate course of study focuses on the artistic and aesthetic uses of letterforms as cultural and communicative forces in society. Students will progress toward the development
of professional skills and techniques in the application of lettering, calligraphy and typography to creative and expressive concepts. Historical and contemporary methods, materials and usage will be explored through a variety of projects. This course may be taken a maximum of 2 times.

*Transfer Credit: CSU*

**ART 287B**

**ROMAN CALLIGRAPHY** 2 UNITS

Class hours: 1 lecture/3 studio

Prerequisite: ART 287A or equivalent with a grade of Credit or "C" or higher.

This course is designed to develop analytical methods and to increase performance skills in the evaluation of letter structure and the grading of Credit or "C" or higher. Expertise and knowledge will be expanded through the exploration of tools, materials, and techniques. This course may be taken a maximum of 3 times.

*Transfer Credit: CSU*

**ASTRONOMY**

*(Science/Engineering/Math Division)*

**ASTR 101**

**ELEMENTARY ASTRONOMY** 3 UNITS

Class hours: 3 lecture

Prerequisite: None.

This is an introductory survey course in the general principles and fundamentals of astronomy. It is designed primarily for non-science majors, physical science general education credit at transfer institutions.

*Transfer Credit: CSU; UC*

**ASTR 102**

**INTRODUCTORY ASTRONOMY:**

**STARS AND THE UNIVERSE** 3 UNITS

Class hours: 3 lecture

Prerequisite: None.

Corequisite: None.

Recommendation: None.

This course is a non-technical introduction to astronomy, with emphasis on the Sun, planets, moons, and smaller bodies which make up the solar system. Topics include the nature of light, the atom, telescopes, an examination of the planets and their moons and rings, the origin of the solar system, comets, asteroids, and meteors, catastrophic events, and the search for planets around other stars. This course is not open to students with credit in ASTR 101.

*Transfer Credit: CSU; UC*

*UC credit limits may apply. ASTR 102 and ASTR 103 combined: maximum credit, one course. No credit for ASTR 102 or ASTR 103 if taken after ASTR 101.*

**ASTR 103**

**INTRODUCTORY ASTRONOMY:**

**THE SOLAR SYSTEM** 3 UNITS

Class hours: 3 lecture

Prerequisite: None.

Corequisite: None.

Recommendation: None.

This course is a non-technical introduction to astronomy, with emphasis on the Sun, planets, moons, and smaller bodies which make up the solar system. Topics include the nature of light, the atom, telescopes, an examination of the planets and their moons and rings, the origin of the solar system, comets, asteroids, and meteors, catastrophic events, and the search for planets around other stars. This course is not open to students with credit in ASTR 101.

*Transfer Credit: CSU; UC*

**ASTR 104**

**LIFE IN THE UNIVERSE** 3 UNITS

Class hours: 3 lecture

Prerequisite: None.

Corequisite: None.

Recommendation: None.

This course is a non-technical introduction to the theory of the origin of life in the universe with emphasis on the origin of terrestrial life in the solar system. Topics include the laws of nature, the double helix of life, the origin of the DNA (Deoxyribonucleic Acid) strand, the proliferation of carbon based life forms, speculation on the nature of non-carbon based life, the evolution of intelligence, and the search for extraterrestrial life.

*Transfer Credit: CSU; UC*

**ASTR 105L**

**OBSERVATIONAL ASTRONOMY** 1 UNIT

Class hours: 3 lab

Prerequisite: ASTR 101, ASTR 102, ASTR 103, ASTR 104, or ASTR 106 or equivalent with a grade of Credit or "C" or higher, or concurrent enrollment.

Corequisite: None.

Recommendation: None.

This is a laboratory course in practical astronomical observations and studies designed for the student with an interest in the use of telescopes and instruments. An opportunity will be provided for additional study as a supplement to the lecture course. Occasional evening observing sessions are required.

*Transfer Credit: CSU; UC*

**ASTR 106**

**HISTORY OF ASTRONOMY** 3 UNITS

Class hours: 3 lecture

Prerequisite: None.

Corequisite: None.

Recommendation: None.

This course explores humanity’s changing view of the cosmos and its place in the universe, from the earliest to the present. Topics include historical cosmologies of ancient cultures, the Copernican revolution, the Enlightenment, and the modern view of the cosmos. Course work includes readings about figures and projects using models of historic instruments.

*Transfer Credit: CSU; UC*

**AUTOMOTIVE COLLISION REPAIR (AUTOBODY)**

*(Technology Division)*

**AB 50A**

**BODY TRIM AND MINOR REPAIRS** 1 UNIT

Class hours: 0.75 lecture/1.25 lab

Prerequisite: None.

Corequisite: None.

Recommendation: None.

This is one in a series of hands-on short courses which prepares students for employment as a collision repair technician apprentice. Major emphasis will be placed on removal and replacement of external panels, bumpers, lights, and trim. Repair of minor body panel dents and the use of power and hand tools will be covered. This course may be taken a maximum of 2 times.

**AB 50B**

**PANEL REPLACEMENT** 1 UNIT

Class hours: 0.75 lecture/1.25 lab

Prerequisite: AB 50A or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.

Corequisite: None.

Recommendation: None.

This is one in a series of hands-on short courses which prepares students for employment as a collision repair technician apprentice. Major emphasis will be placed on removal and replacement of external panels, doors, tailgates, rear hatches etc. Content will also include repair of more complex non-structural body panels, introduction of additional power and hand tools, water leak and wind noise detection and correction. This course may be taken a maximum of 2 times.
and gauging for damage, cooling and electrical components, and continued welding and metallurgical experience. This course may be taken a maximum of 2 times.

**AB 54**
**ADVANCED DESIGN AUTOMOTIVE PANEL REPAIR 4.5 UNITS**
Class hours: 3 lecture/5 lab
Prerequisite: None.
Corequisite: AB 51 or equivalent with a grade of Credit or "C" or higher or prior completion. This course emphasizes alignment and repair of advanced design automotive body panels, such as tempered sheet metal, aluminum, plastics, fiberglass, and composites. Additional topics include repair and installation of structural members, removal and replacement of electrical and electronic components, and related interior parts. This course may be taken a maximum 2 times.

**AB 55**
**STRUCTURAL PANEL REPLACEMENT 4.5 UNITS**
Class hours: 3 lecture/5 lab
Prerequisite: None.
Corequisite: AB 51 or equivalent with a grade of Credit or "C" or higher or prior completion. This course emphasizes frame and structural repair. Instruction includes repair and replacement of structural body panels, remove and replacement of power train and supports, gauging and analysis of major structural damage, plus the measurement and alignment of strut towers. Appropriate safety related instructions will be included in each segment. This course may be taken a maximum of 2 times.

**AB 56**
**NON-STRUCTURAL AUTOMOTIVE WELDING 2 UNITS**
Class hours: 1.5 lecture/2.5 lab
Prerequisite: None.
This course introduces students to oxy-acetylene, Gas Metal Arc Welding (GMAW), stick arc, and pressure resistance welding. It is designed for the student who is presently employed in the automotive field. Related technical subjects include safety, testing of weld joints, design, strength of materials, process selection, cutting methods and metals identification. A major focus of this course is to prepare students to complete the I-CAR GMAW Certification Test.

**AB 57**
**STRUCTURAL AUTOMOTIVE WELDING 2 UNITS**
Class hours: 1.5 lecture/2.5 lab
Prerequisite: AB 56 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course further develops student skills in the use of Gas Metal Arc Welding (GMAW) equipment and methods related to the repair, maintenance and alteration of the automobile structure. Special emphasis will be placed upon GMAW of structural high strength steel, aluminum welding, plasma arc and oxyacetylene cutting. A major focus of this course is to prepare students to complete the I-CAR GMAW Certification Test. Appropriate safety related instructions are included in each segment. This course may be taken a maximum of 3 times.

**Transfer Credit: CSU**

**AB 58**
**COLLISION REPAIR UPDATE 4.5 UNITS**
Class hours: 3 lecture/5 lab
Prerequisite: AB 51, AB 52, and AB 53 or equivalent courses with grades of Credit or "C" or higher, or appropriate work experience. AB 54 may be substituted for AB 53.
This course increases skills and knowledge by updating the student in areas of their choice. Update areas would include refinishing of plastics, advanced design automotive components, metal finishing, complex frame and structural repair, and advanced welding. This course may be taken a maximum of 3 times.

**AB 59A**
**COMPUTERIZED MEASURING TRAINING 1 UNIT**
Class hours: 1 lecture/1 lab
Prerequisite: None.
Corequisite: AB 51 or equivalent, with a grade of Credit or "C" or higher or prior completion Recommend: Proficient in MS Windows software applications.
The focus of this course is for students to become proficient in the operation and use of Computerized Measuring Training (CMT). Students will learn to properly identify vehicles, components and systems, select and install the appropriate scan targets and attachments onto various vehicles, and provide digital measuring with the Genesis computerized measuring system. Topics include basic collision theory, damage analysis fundamentals, maintenance, and operation of the Genesis2 and Velocity laser measuring systems. The processes and methods used within the software program and laser scanners will be reviewed extensively. This course may be taken a maximum of 2 times.
AB 59B
UNITSIZED BODY ANALYSIS
AND REPAIR PLANNING  1 UNIT
Class hours: 1 lecture/1 lab
Prerequisite: AB 51 or AB 59A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: Current or previous employment in collision repair facility.
This course introduces students to the concepts of damage analysis and repair planning for unitized body vehicles. It is designed for structural repair technicians and students with limited training in structural repair. The course presents case studies that give students the information needed to measure, analyze, and develop repair plans for damaged unitized structures. It provides foundation information for intermediate and advanced analysis and repair courses. This course may be taken a maximum of 2 times.

AB 59C
FULL FRAME ANALYSIS
AND REPAIR PLANNING  1 UNIT
Class hours: 1 lecture/1 lab
Prerequisite: AB 51, AB 59A or AB 59B or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: Current or previous employment in collision repair facility.
This course introduces students to the concepts of damage analysis and repair planning for full-frame vehicles. It is designed for structural repair technicians and students with limited training in structural repair. The course presents case studies that give students the information needed to measure, analyze, and develop repair plans for damaged full-frame structures. It provides foundation information for intermediate and advanced analysis and repair courses. This course may be taken a maximum of 2 times.

AB 59E
FULL FRAME REPAIR-GAUGES  1 UNIT
Class hours: 1 lecture/1 lab
Prerequisite: AB 51 or AB 59B or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course furthers student learning in full-frame damage analysis and repair with universal measuring gauges. Included topics are full-frame vehicle design analysis, effects of collisions on various full-frame designs, full-frame damage assessment using universal measuring gauges, full-frame vehicle hookup and repair options, and methods of determining repair completion with universal measuring gauges. This course may be taken a maximum of 2 times.

AB 60A
SANDING AND PAINT PREPARATION  1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is one in a series of hands-on short courses which prepares students for employment as an automotive refinishing apprentice. Major emphasis will be placed on removal and installation of moldings and trim, sanding and preparation of substrate finish, and the use of two-component putty. This course may be taken a maximum of 2 times.

AB 60B
MIXING AND APPLICATION OF PAINT  1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is one in a series of hands-on short courses which prepares students for employment as an automotive refinishing apprentice. Major emphasis will be placed on removal and installation of moldings and trim, sanding and preparation of substrate finish, and the use of two-component putty. This course may be taken a maximum of 2 times.

AB 60C
PAINT DEFECTS: CAUSES AND CURES: 1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: AB 60A and AB 60B or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This is one in a series of hands-on short courses which prepares students for employment as an automotive refinishing apprentice. Major emphasis will be placed on removal and installation of moldings and trim, sanding and preparation of substrate finish, and the use of two-component putty. This course may be taken a maximum of 2 times.

AB 61
PREPARATION AND SPOT REFINISHING  4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: None.
Corequisite: AB 51 or equivalent, with a grade of Credit or “C” or higher or prior completion.
This course introduces beginning techniques for automotive refinishing preparation and spot painting techniques. This course includes basic use of abrasives, primers, fillers, and sealers. Students are instructed in the use of solvents, pre-coats, and basic material problems encountered in today’s refinishing market. This course may be taken a maximum of 2 times.

AB 62
OVERALL AND MULTI-COAT REFINISHING  4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: None.
Corequisite: AB 51 or equivalent with a grade of Credit or “C” or higher or prior completion.
This course develops the skills of the professional automotive refinisher in overall and multi-coat refinishing. Students will be instructed in the art of tinting colors, spot repair of factory and after-market multi-coat finishes, overall refinishing, interior/exterior care and maintenance, and the refinishing of plastic components. The course includes the testing, research and development of current refinishing materials. I-CAR certification criteria will be incorporated in the training and discussions. This course may be taken a maximum of 2 times.

AB 63
PRODUCTION REFINISHING  4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: None.
Corequisite: AB 51 or equivalent with a grade of Credit or “C” or higher or prior completion.
This course increases the marketable skills for the professional automotive refinisher in the trade. Emphasis is on the use of automotive toners to scratch paint and prepare and finish several vehicles, simultaneously. Areas covered include repair of minor body dings, paint preparation, mixing of multiple colors, plus the masking and painting of up to three separate vehicles of varying models, colors, and types. This course provides students with hands-on techniques for increasing the volume of vehicles processed in the professional automotive refinishing environment. This course may be taken a maximum of 2 times.

AB 65
ADJUSTING COLOR  2 UNITS
Class hours: 1.5 lecture/2.5 lab
Prerequisite: None.
This course introduces students to the concepts of adjusting color for automotive refinishing preparation and spot painting techniques. This course includes basic use of abrasives, primers, fillers, and sealers. Students are instructed in the use of solvents, pre-coats, and basic material problems encountered in today's refinishing market. This course may be taken a maximum of 2 times.
AB 66
LETTERING, STRIPING AND DESIGN  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This course trains students in the arts of automotive lettering, graphic design, and pin-striping. Students work with lines, colors, and harmonizing/contrasting concepts to create special effects on commercial and passenger vehicles using a wide range of materials and techniques. Included in this course are the use of computer-generated graphics, stencil making, hand pin-stripping, and air-brushing. This course may be taken a maximum of 2 times.

AB 68
REFINISHING UPDATE  4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: AB 61, AB 62, and AB 63 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
This course is designed to increase skill and knowledge as well as update students in automotive refinishing areas of their choice. It will emphasize automotive refinishing and plastic repair techniques, panel and spot painting, sanding and preparation techniques, and overall and multi-coat painting. This course may be taken a maximum of 4 times.

AB 73/74
AUTOMOTIVE COLLISION REPAIR OCCUPATIONAL WORK EXPERIENCE  3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Automotive Collision Repair work experience 73 or 20 hours of employment per week for Automotive Collision Repair work experience 74. The employment must be in a job related to the student’s educational goal.
Corequisite: (1) Concurrent enrollment in the Automotive Collision Repair vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Automotive Collision Repair students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken a maximum of 4 times.

AB 75
BODY PANEL MODIFICATION  4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course emphasizes design and fabrication of automotive body panels. Additional topics include customization of existing body panels, panel fabrication, metal finishing, fabrication welding techniques and the application and use of the sheet metal brake, sheer, shrinker/stretcher, and bead roller. This course may be taken a maximum of 2 times.

AB 76
PARTIAL-PANEL FABRICATION  4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: AB 75 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course furthered student learning in the area of automotive sheet metal design and fabrication. Students will learn to design and fabricate portions of sheet metal panels to be replaced on vehicles. Reproduction of more complex angles and shapes will be introduced. Use of specific sheet metal design and fabrication tools and equipment with appropriate techniques will be included. This course may be taken a maximum of 2 times.

AB 77
FULL-PANEL FABRICATION  4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: AB 51 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: AB 75 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
In this course student learning is elevated to the level of full-panel sheet metal design and fabrication. Complete sheet metal panel fabrication will be demonstrated using predetermined shapes and forms. Formation of compound angles and complex shapes encompassing an entire panel will be addressed. Included are the continued application and use of advanced sheet metal fabrication tools and equipment. This course may be taken a maximum of 2 times.

AB 79
AUTOMOTIVE FABRICATION PROJECTS  4.5 UNITS
Class hours: 3 lecture/5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: AB 51 or AB 75 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course allows students to hone hands-on skills while completing automotive body panel fabrication projects. Students will identify and select specific projects that are relevant to the subject matter being taught. This course may be taken a maximum of 2 times.

AB 80
AUTOBODY CUSTOMER SERVICE  2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on effective customer service in an automotive collision repair facility. Students learn appropriate use of collision repair industry terminology, measuring and improving levels of customer service, interpreting body language, conflict resolution, telephone and in-person communication skills, personal conduct and business ethics, and the completion of paperwork related to autobody customer service positions. This course may be taken a maximum of 4 times.

AB 80A
VEHICLE STAGING  1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Limitation of Enrollment: Students must have valid and current drivers’ license and proof of appropriate automobile insurance.
This is one in a series of hands-on short courses which prepare students for employment as a porter in an automotive shop operation. Major emphasis will be placed on safe driving and parking, vehicle clean up, customer contact, and the staging of vehicles within an automotive repair facility at the start and end of each day. This course may be taken a maximum of 2 times.

AB 80B
DAMAGE ANALYSIS AND AUTOMOTIVE SYSTEMS  1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is one in a series of hands-on short courses which prepares students for employment as an automotive office assistant. Major emphasis will be placed on damage analysis, estimating the cost of repair, legal and environmental practices, and vehicle systems knowledge. This course may be taken a maximum of 2 times.
AB 80C
VEHICLE TYPES AND CUSTOMER RELATIONS 1 UNIT
Class hours: 0.75 lecture/1.25 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is one in a series of hands-on short courses which prepares students for employment as an automotive office assistant. Major emphasis will be placed on vehicle construction types, fasteners and materials, parts acquisition sources and customer relations. This course may be taken a maximum of 2 times.

AB 83A
COMPUTERIZED DAMAGE ESTIMATING-ADP 1.5 UNITS
Class hours: 1.5 lecture/.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Proficient in MS Windows software applications.
The focus of this course is for students to become proficient in Automated Data Processing (ADP) collision damage estimating program. Students will learn to properly identify vehicles, components and systems, and to select and input the appropriate replacement parts and labor costs into a computerized damage report. Topics include development of customer and insurance company profiles, maintenance of user accounts, the generation of supplemental damage reports and the use of software-specific part codes, as currently used in the collision repair industry. The processes and methods used within the ADP software program will be reviewed extensively. This course may be taken a maximum of 2 times.

AB 83C
COMPUTERIZED DAMAGE ESTIMATING-CCC 1.5 UNITS
Class hours: 1.5 lecture/.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Proficient in MS Windows software application.
The focus of this course is for students to become proficient in CCC collision damage estimating program. Students will learn to properly identify vehicles, components and systems, and to select and input the appropriate replacement parts and labor costs into a computerized damage report. Topics include development of customer and insurance company profiles, maintenance of user accounts, the generation of supplemental damage reports and the use of software-specific part codes, as currently used in the collision repair industry. The processes and methods used with the CCC software program will be reviewed extensively. This course may be taken a maximum of 2 times.

AB 83M
COMPUTERIZED DAMAGE ESTIMATING-MITCHELL 1.5 UNITS
Class hours: 1.5 lecture/5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Proficient in MS Windows software applications.
The focus of this course is for students to become proficient in Mitchell Information Systems (Mitchell) collision damage estimating program. Students will learn to properly identify vehicles, components and systems, and to select and input the appropriate replacement parts and labor costs into a computerized damage report. Topics include development of customer and insurance company profiles, maintenance of user accounts, the generation of supplemental damage reports and the use of software-specific part codes, as currently used in the collision repair industry. The processes and methods used within the Mitchell software program will be reviewed extensively. This course may be taken a maximum of 2 times.

AB 86
PRODUCTION MANAGEMENT 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on production management and improving workflow in automotive repair facilities. The course includes job analysis, task prioritizing, job descriptions, flow charting, capacity planning, parts and material procurement, production controls, cycle time analysis, and development of key controls for management. This course may be taken a maximum of 4 times.

AB 88
ESTIMATING AND MANAGEMENT UPDATE 3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: Nine units of collision repair estimating and/or management or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course increases skills and knowledge in collision repair estimating, management, and customer relations for students considering a career in the auto body repair industry. It includes computerized automotive damage estimating, shop management, customer relations, and communications. This course may be taken a maximum of 4 times.

AB 181
NON-STRUCTURAL DAMAGE ESTIMATING 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Proficient in MS Windows software applications.
This is an entry-level course for students wanting to learn to estimate non-structural (minor) automotive damage from collisions. Emphasis is on vehicle construction and structural design, repair methodology, vehicle component and systems identification, and in developing appropriate "judgement repair times" (estimated repair times for damage). Students learn to properly format hand-written estimates identifying the cost of parts, labor, materials, and sublet and other charges required to return damaged vehicles to factory specifications. Hands-on demonstration of repair techniques helps students increase their knowledge of repair processes recommended in their damage estimates. Students use collision estimating guides to establish parts prices and industry standard labor times for replacement and refinishing of damaged parts; additionally, students learn to use “Procedure Pages” in the estimating guides for processes not included in the standard times listed in the guide. Computerized estimating is introduced as students demonstrate proficiency in developing concise hand-written estimates. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

AB 182
STRUCTURAL DAMAGE ESTIMATING 3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Proficient in MS Windows software applications.
This course extends student skills in collision damage estimating of more complex areas of structural, mechanical, and electrical damage to vehicles. Areas of study include expanded understanding of collision theory, damage analysis fundamentals, visual inspection process, measuring and analyzing structural damage, suspension and mechanical systems damage estimating, build tolerances, and safety systems as related to severely damaged vehicles. Other topics include estimator job functions, methods of determining customer satisfaction, regulatory compliance issues, and ethics within the collision repair industry. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

177
AB 183
COMPUTERIZED
DAMAGE ESTIMATING  1.5 UNITS
Class hours: 1.5 lecture/.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.

The focus of this course is for students to become proficient in software-specific collision damage estimating program. Students will learn to properly identify vehicles, components and systems, and to select and input the appropriate replacement parts and labor costs into a computerized damage report. Topics include development of custom and insurance company profiles, maintenance of user accounts, the generation of supplemental damage reports and the use of software-specific part codes, as currently used in the collision repair industry. The processes and methods used within the software program will be reviewed extensively. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

AB 281
STRUCTURAL DAMAGE ANALYSIS FOR ESTIMATORS  1 UNIT
Class hours: 1 lecture/1 lab
Prerequisite: AB 51, AB 181, or AB 182 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: Current or previous employment in collision repair facility.
This course is designed to help the collision damage estimator, appraiser and student better understand the process of analyzing structural and suspension damage. Collision theory, industry terminology, structural design, the visual inspection process and measuring and repair equipment are covered in the course. Anchoring and pulling concepts are described in detail. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

AB 282
STEERING AND SUSPENSION FOR DAMAGE ESTIMATORS  1 UNIT
Class hours: 1 lecture/1 lab
Prerequisite: AB 281 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: Current or previous employment in collision repair facility.
This course is designed to assist the collision damage estimator, appraiser and student to better understand the process of analyzing steering and suspension damage from collisions. It builds on student knowledge gained from the prerequisite course and assists in mastery of steering and suspension damage analysis. Specialized procedures to verify steering and suspension alignment are practiced herein.
Transfer Credit: CSU

AB 283
ADVANCED FRAME ANALYSIS FOR ESTIMATORS  1 UNIT
Class hours: 1 lecture/1 lab
Prerequisite: AB 52, AB 281 or AB 282 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is designed to build on student knowledge gained from the prerequisite course and to assist in mastery of collision damage analysis. The focus of this course expands damage analysis specifically for pickup trucks and sport utility vehicles.
Transfer Credit: CSU

AB 285
COLLISION REPAIR MANAGEMENT  3 UNITS
Class hours: 2 1/2 lecture/1 1/2 lab
Prerequisite: None.
Recommendation: Proficient in MS Windows software applications.
This course focuses on effective management and operation of automotive repair facilities. Students are introduced to skills required for effective management and promotion of an automotive repair facility. Areas of training include development of policies, rules and regulations, job-costing, equipment and material procurement, facility cost analysis, safety, employee and right-to-know issues, and warranties. Other topics include department operations, job functions, compensation packages, production controls, capacity planning, cycle-time analysis, customer satisfaction, licensing and certification, effective communication skills, process improvement, and time management. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

AB 287
ADVANCED COLLISION REPAIR MANAGEMENT  2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course includes presentation of the wide range of skills required to effectively direct manage and promote a multi-location collision repair facility. Areas of advanced training include rules and regulations related to the automotive repair industry, job costing, equipment and material procurement, facility cost analysis, department operations, safety, employee and right-to-know issues, warranties, customer satisfaction, licensing and certification, from the perspective of consolidator and/or franchise body shop operations. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY
( Technology Division)

AUTO 1
ENGINE MAINTENANCE  0.5 UNIT
Class hours: .5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental course in automotive engines, dealing with maintenance of the modern automobile. Emphasis is on the elementary operating principles and beginning skill development. This three-week section is designed to allow students to become familiar with automotive engines and enter the work environment with basic skills.

AUTO 2
FUEL SYSTEMS  0.5 UNIT
Class hours: 5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental course in automotive fuel systems, dealing with maintenance of the modern automobile. Emphasis is on the elementary operating principles and beginning skill development. This three-week section is designed to allow students to become familiar with automotive fuel systems and enter the work environment with basic skills.

AUTO 3
LUBRICATION AND COOLING  0.5 UNIT
Class hours: 5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental course in automotive lubrication and cooling systems, dealing with maintenance of the modern automobile. Emphasis is on the elementary operating principles and beginning skill development. This three-week section is designed to allow students to become familiar with automotive lubrication and cooling systems and enter the work environment with basic skills.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
HEATING 0.5 UNIT
Class hours: 5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental course in automotive heating and air conditioning designed to allow students to become familiar with automotive heating and air conditioning and enter the work environment with basic skills.

AUTO 4 ELECTRICAL SYSTEMS 0.5 UNIT
Class hours: 5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental course in automotive electrical systems dealing with maintenance of the modern automobile. Emphasis is on the elementary operating principles and beginning skill development. This three-week section is designed to allow students to become familiar with automotive electrical systems and enter the work environment with basic skills.

AUTO 5 BRAKES AND SUSPENSION 0.5 UNIT
Class hours: 5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental course in automotive brake and suspension systems, dealing with maintenance of the modern automobile. Emphasis is on the elementary operating principles and beginning skill development. This three-week section is designed to allow students to become familiar with automotive brake and suspension systems and enter the work environment with basic skills.

AUTO 6 TRANSMISSION AND DRIVE TRAIN 0.5 UNIT
Class hours: 5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental course in automotive transmission and drive train systems dealing with maintenance of the modern automobile. Emphasis is on the elementary operating principles and beginning skill development. This three-week section is designed to allow students to become familiar with automotive transmission and drive train systems and enter the work environment with basic skills.

AUTO 7 AIR CONDITIONING AND HEATING 0.5 UNIT
Class hours: 5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a fundamental course in automotive air conditioning dealing with maintenance of the modern automobile. Emphasis is on the elementary operating principles and beginning skill development. The course is designed to allow students to become familiar with automotive heating and air conditioning and enter the work environment with basic skills.

AUTO 8 (Not degree applicable) FORD ELECTRONIC ENGINE CONTROLS EEC 3 & 4 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Ford electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection.

AUTO 9 (Not degree applicable) CHRYSLER ELECTRONIC FUEL INJECTION 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Chrysler electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection.

AUTO 10 (Not degree applicable) GENERAL MOTORS FUEL INJECTION 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of General Motors electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection.

AUTO 11 (Not degree applicable) FORD ELECTRONIC ENGINE CONTROLS EEC 3 & 4 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Ford electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection.

AUTO 12 (Not degree applicable) FORD MAINTENANCE AND LIGHT REPAIR FOR STEERING AND SUSPENSION SYSTEMS 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a theory/practical course in electricity and automotive electronic systems, such as batteries, Ford audio systems, and supplemental restraints. The content will be presented on a single manufacturer’s product line. This course may be taken a maximum of 2 times.

AUTO 13 (Not degree applicable) ELECTRONICS TRAINING 2.5 UNITS
Class hours: 2.25 lecture/2.25 lab
Prerequisite: None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors.

AUTO 14 (Not degree applicable) IMPORT FUEL INJECTION SYSTEMS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Nissan, Toyota, and Bosch electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection.

AUTO 15 (Not degree applicable) SPECIALIZED ELECTRONICS TRAINING 2.5 UNITS
Class hours: 2.25 lecture/2.25 lab
Prerequisite: None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors.

AUTO 16 (Not degree applicable) FORD MAINTENANCE AND LIGHT REPAIR FOR ELECTRICAL AND ELECTRONIC SYSTEMS 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a theory/practical course in electricity and automotive electronic systems, such as batteries, Ford audio systems, and supplemental restraints. The content will be presented on a single manufacturer’s product line. This course may be taken a maximum of 2 times.

AUTO 17 (Not degree applicable) ELECTRONICS TRAINING 2.5 UNITS
Class hours: 2.25 lecture/2.25 lab
Prerequisite: None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors.

AUTO 18 (Not degree applicable) IMPORT FUEL INJECTION SYSTEMS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Nissan, Toyota, and Bosch electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection.

AUTO 19 (Not degree applicable) SPECIALIZED ELECTRONICS TRAINING 2.5 UNITS
Class hours: 2.25 lecture/2.25 lab
Prerequisite: None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors.

AUTO 20 (Not degree applicable) FORD MAINTENANCE AND LIGHT REPAIR FOR ELECTRICAL AND ELECTRONIC SYSTEMS 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a theory/practical course in electricity and automotive electronic systems, such as batteries, Ford audio systems, and supplemental restraints. The content will be presented on a single manufacturer’s product line. This course may be taken a maximum of 2 times.

AUTO 21 (Not degree applicable) ELECTRONICS TRAINING 2.5 UNITS
Class hours: 2.25 lecture/2.25 lab
Prerequisite: None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors.

AUTO 22 (Not degree applicable) IMPORT FUEL INJECTION SYSTEMS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Nissan, Toyota, and Bosch electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection.

AUTO 23 (Not degree applicable) SPECIALIZED ELECTRONICS TRAINING 2.5 UNITS
Class hours: 2.25 lecture/2.25 lab
Prerequisite: None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors.

AUTO 24 (Not degree applicable) FORD MAINTENANCE AND LIGHT REPAIR FOR ELECTRICAL AND ELECTRONIC SYSTEMS 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a theory/practical course in electricity and automotive electronic systems, such as batteries, Ford audio systems, and supplemental restraints. The content will be presented on a single manufacturer’s product line. This course may be taken a maximum of 2 times.

AUTO 25 (Not degree applicable) ELECTRONICS TRAINING 2.5 UNITS
Class hours: 2.25 lecture/2.25 lab
Prerequisite: None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors.

AUTO 26 (Not degree applicable) IMPORT FUEL INJECTION SYSTEMS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
A theory/practical course in the operation and diagnosing of Nissan, Toyota, and Bosch electronic engine controls, including driveability problem areas such as electronic ignition, feedback carburetion, onboard diagnostic systems, and electronic fuel injection.

AUTO 27 (Not degree applicable) SPECIALIZED ELECTRONICS TRAINING 2.5 UNITS
Class hours: 2.25 lecture/2.25 lab
Prerequisite: None.
This course is a study of the principles of automotive electronics to include fundamentals, circuits, meter use, repair, and microprocessors.
Announcement of Courses

AUTO 36
FORD MAINTENANCE AND LIGHT REPAIR FOR BRAKE SYSTEMS  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a theory/practical course in basic brake and anti-lock brakes on a single manufacturer’s car line. Included are operating principles, component description, diagnosis, repair, and service adjustments. This course may be taken a maximum of 2 times.

AUTO 37
FORD MAINTENANCE AND LIGHT REPAIR FOR CLIMATE CONTROL SYSTEMS  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a study of the principles of automotive air conditioning systems. The tools, skills, and processes necessary to perform the most common and essential air conditioning service procedures are studied and demonstrated in the shop. All instruction will be done on a single manufacturer’s units. This course may be taken a maximum of 2 times.

AUTO 50
INTRODUCTION TO AUTOMOTIVE  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This introductory course deals with the basic systems of the modern automobile with emphasis on operating principles. Major areas of instruction will include electrical, engine, transmission, brake and accessory systems. The course is designed as an entry level automotive offering so students may survey the automotive service industry.

AUTO 53
AUTOMOTIVE GM/ADVANCED CONSULTATIVE SELLING  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: AUTO 73/74 or equivalent student internship with GM dealership, and BA 121 or equivalent with grades of Credit or “C” or higher.
This course is one in a series of GM PASS courses designed to bring the student to an entry-level position as a sales consultant within the General Motors dealership organization. It introduces the participants to the advanced skills necessary to begin selling automobiles through more pro-active customer-oriented sales efforts. Emphasis is placed on the development and practice of advanced professional sales techniques in the area of consultative value selling.

AUTO 54
INTRODUCTION TO ELECTRIC VEHICLES  4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Corequisite: None.
This course introduces the student to the world of Electric Vehicle Conversions. Students will be instructed with alternatives to gasoline powered vehicular travel and to the specific advantages of Electric Powered Automobiles. Topics to be included are: the process of conversion of a gas-powered vehicle to electric power, including the testing, assembly, operation and maintenance of EV’s, the disassembly and re-assembly of an EV, introduction to battery and charging systems, optional power accessories and EV drive systems. Appropriate safety related instructions will be included in each segment. This course may be taken a total of 2 times.

AUTO 55
ADVANCED TECHNOLOGY ELECTRIC VEHICLES  4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Corequisite: None.
This course develops students skills in electric vehicle conversions and introduces them to advanced technology EV’s and purpose-built EV’s. Students will work with hybrid electric vehicles and advanced design EV’s. Topics included are the conversion process of kit cars to electric power, including the testing, assembly, operation and maintenance of EV’s; the benefits of aerodynamic designs for EV’s; introduction to advanced technology batteries and intelligent charging systems; optional hydrogen fuel cell technology; and alternative EV drive systems. Appropriate safety related instructions will be included in each segment. This course may be taken a maximum of 3 times.

AUTO 60
INTRODUCTION TO INTELLIGENT TRANSPORTATION SYSTEMS (ITS AND TELEMATICS)  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This survey course introduces the student to Intelligent Transportation Systems (ITS) and telematics. Topics discussed include the history of ITS, government and industry organizations and standards, recent technological advances, navigation, wireless communication, telecommunication, traffic safety, and traffic management. The material focuses on current trends and opportunities in the field of Intelligent Transportation Systems (Formerly AUTO 81)

AUTO 73/74
AUTOMOTIVE MECHANICAL REPAIR OCCUPATIONAL WORK EXPERIENCE  3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Automotive Mechanical Repair work experience 73 or 20 hours of employment per week for Automotive Mechanical Repair work experience 74. The employment must be in a job related to the student’s educational goal.
Corequisite: (1) Enrollment in the Automotive Mechanical Repair vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Automotive Mechanical Repair students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken a maximum of 4 times.

AUTO 80
BUREAU OF AUTOMOTIVE REPAIR (BAR) ASE ALTERNATIVE COURSES FOR ADVANCED EMISSIONS SPECIALIST  5 UNITS
Class hours: 4 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Appropriate work experience.
This alternative course will meet and exceed the Bureau of Automotive Repair (BAR) for Automotive Service Excellence (ASE) certification requirements for the following areas: Electrical, Engine Performance, and Advanced Engine Performance. This course meets theory/practical requirements for obtaining the state license for Advanced Smog Technician.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
### AUTO 81
**POWERTRAIN CONTROL**

**MANAGEMENT SCOPE TESTING**
2 UNITS

Class hours: 2 lecture/5 lab
Prerequisite: None.
Corequisite: None
Recommendation: None.
This is a course in the theory and practice of powertrain control management (PCM) scope testing. Hand-held oscilloscopes and scanners will be used to analyze PCM input and output signals to various actuators while comparing this data to manufacturers' specifications.

### AUTO 100
**AUTOMOTIVE MAINTENANCE AND OPERATION**

4 UNITS

Class hours: 3 lecture, 3 lab
Prerequisite: None.
Basic class dealing with the selection and maintenance of the modern automobile. Emphasis is on the basic operating principles.
Transfer Credit: CSU

### AUTO 110
**AUTOMOTIVE ENGINES**

5 UNITS

Class hours: 4 lecture/4 lab
Prerequisite: None.
Recommendation: AUTO 100 or equivalent with a grade of Credit or “C” or higher.
This is a theory/practical course in Automotive Engine Repair to include operating principles and descriptions of all components. The emphasis is on diagnosis and measurement of internal engine components. Complete disassembly and reassembly of engines will be accomplished with the emphasis on manufacturer's specialty tools and techniques of overhead cam engines. (Formerly AUTO 140)
Transfer Credit: CSU

### AUTO 111
**AUTOMOTIVE ENGINES**

4 UNITS

Class hours: 10 lecture/10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: AUTO 100 or equivalent with a grade of Credit or “C” or higher.
This is a theory/practical course in Automotive Engine Repair that includes operating principles and descriptions of all components. The emphasis is on diagnosis and measurement. Complete disassembly and reassembly of engines will be accomplished with the emphasis on manufacturer's specialty tools and techniques of overhead cam engines. Course content will be presented on a single manufacturer's engine. (Formerly AUTO 141)
Transfer Credit: CSU

### AUTO 120
**AUTOMATIC TRANSMISSIONS/TRANSMIXLES**

5 UNITS

Class hours: 4 lecture/4 lab
Prerequisite: None.
Recommendation: AUTO 110 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course is focused on the principles of automatic transmissions and transmixles. Procedures for diagnosing troubles, adjusting, and overhauling the automatic transmission and transmixles are studied and applied in the shop. This course may be taken a maximum of 2 times. (Formerly AUTO 226)
Transfer Credit: CSU

### AUTO 121
**DRIVETRAIN TRANSMISSIONS AND AXLES**

6 UNITS

Class hours: 5 lecture/5 lab
Prerequisite: None.
Corequisite: AUTO 73/74.
Recommendation: AUTO 181 or equivalent with a grade of Credit or “C” or higher.
This course is a study of the principles of the automotive power systems-clutch, manual and automatic transmission, transaxle, transfer case, driveline, drive-axle, differential, including diagnosis and service. This course is taught using specified manufacturer's components and materials. (Formerly AUTO 161)
Transfer Credit: CSU

### AUTO 130
**MANUAL DRIVETRAIN AND AXLES**

5 UNITS

Class hours: 4 lecture/4 lab
Prerequisite: None.
Recommendation: AUTO 100 or equivalent with a grade of Credit or “C” or higher.
This is a study of the principles of the automotive power systems-clutch, manual and automatic transmission, transaxle, transfer cases, drive line, drive-axle, differential, and all-wheel drive systems and service, including diagnosis and service. This course may be taken a maximum of 2 times. (Formerly AUTO 160)
Transfer Credit: CSU

### AUTO 140
**AUTOMOTIVE STEERING AND SUSPENSION**

5 UNITS

Class hours: 4 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: AUTO 100 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This is a course in the theory and practice of steering, suspension, and wheel alignment. It includes operating principles, component description, diagnosis, and service. Alignment instruction includes electronic four-wheel alignment. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

### AUTO 150
**AUTOMOTIVE BRAKES**

5 UNITS

Class hours: 4 lecture/4 lab
Prerequisite: None.
Recommendation: AUTO 100 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This is a theoretical and practical course in braking systems. It includes operating principles, component description, diagnosis, and service. Brake service includes antilock braking systems. This course may be taken a maximum of 2 times. (Formerly AUTO 120)
Transfer Credit: CSU

### AUTO 151
**AUTOMOTIVE ALIGNMENT BRAKE AND SUSPENSION**

6 UNITS

Class hours: 5 lecture/5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in AUTO 73/74.
This is a theoretical and practical course in basic alignment, brakes, steering, and suspension on a single manufacturer's car line. Included are operating principles, component description, diagnosis, repair, and service adjustments. This course is designed to accompany work experience in the trade. (Formerly AUTO 121)
Transfer Credit: CSU

### AUTO 160
**AUTOMOTIVE ELECTRICITY**

5 UNITS

Class hours: 4 lecture/4 lab
Prerequisite: None.
Recommendation: AUTO 100 or equivalent with a grade of Credit or “C” or higher.
This is a theoretical and practical course in basic electricity and automotive electrical systems such as battery, starting, charging, and electronic ignition. Test equipment and computer systems will also be covered. (Formerly AUTO 130)
Transfer Credit: CSU

### AUTO 161
**AUTOMOTIVE ELECTRICITY**

7 UNITS

Class hours: 6 lecture/4 lab
Prerequisite: None.
Corequisite: AUTO 73/74.
Recommendation: AUTO 100 or AUTO 151

---

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
or equivalent with a grade of Credit or "C" or higher.
This is a theory/practical course in basic
electricity and automotive electrical systems,
such as battery, starting, charging, and
electronic ignition systems. The content will be
presented on a single manufacturer's product
line. (Formerly AUTO 131)
Transfer Credit: CSU

AUTO 170
AUTOMOTIVE AIR
CONDITIONING        4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: AUTO 81 or equivalent with a
grade of Credit or "C" or higher, or appropriate
work experience.
This theory and shop course is designed
to teach basic automotive air conditioning;
tools, skills and processes associated with the
modern automobile; related information for
developing knowledge and skills necessary
to perform the most common and essential
air conditioning service procedures. This
course may be taken a maximum of 2 times.
(Formerly AUTO 170)
Transfer Credit: CSU

AUTO 181
ELECTRONIC ENGINE MANAGEMENT
SYSTEMS - CORPORATE       6 UNITS
Class hours: 5 lecture/5 lab
Prerequisite: None.
Corequisite: AUTO 73/74.
Recommendation: AUTO 100 or equivalent
with a grade of Credit or "C" or higher.
This is a theory/practical course in diagnosing
automotive driveability problems. Areas
such as ignition, carburetion, automotive
computers, electronic engine controls and on-
board diagnostic systems will be included.
The course will be presented using a single
manufacturer's product line. (Formerly AUTO
231)
Transfer Credit: CSU

AUTO 182
INTRODUCTION TO
ALTERNATIVE FUELS       3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to the
role, function, and practical application of
Compressed Natural Gas (CNG) as an
alternative fuel for the internal combustion
engine. Propane, methanol, and hydrogen are
also discussed. (Formerly AUTO 192)
Transfer Credit: CSU

AUTO 185
AUTOMOTIVE MANAGEMENT        3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recomendation: AUTO 100 or equivalent
with a grade of Credit or "C" or higher.
This course is designed to furnish the student
with knowledge, experience and practice in
operation and management of an automobile
repair facility. Emphasis is placed on customer
relations, scheduling, cost estimation, and
efficient, effective use of time and space.
Transfer Credit: CSU

AUTO 190
CUSTOMER RELATIONS        3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Employment in an automotive service professional.
This course deals with the selling of automotive
car warranties, service contracts, and regulatory
issues.
Transfer Credit: CSU

AUTO 195
AUTOMOTIVE
CAREERS AND OPPORTUNITIES     3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Employment in an automotive
repair facility or full-time automotive student.
This course deals with the selling of automotive
services to the general public and automotive
fleet managers. All aspects of customer
relations and developing skills necessary to
properly communicate with customers are
covered. Special emphasis will be given to
interpersonal relationship development and
customer confidence building. Cultural

differences will be discussed as they affect sales techniques. This course provides participants with the necessary knowledge and skills to effectively handle situations that occur when dealing with unusual, complex or ethical problems.

**Transfer Credit:** CSU

**AUTO 210**

**AUTOMOTIVE MACHINE SHOP**  5 UNITS

Class hours: 4 lecture/4 lab
Prerequisite: None.
Recommendation: AUTO 100 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course is designed to teach students the basic operations used in the automotive machine shop. It concentrates on cylinder head, cylinder block, and piston and connecting rod assemblies. An overview of other related operations such as honing techniques, cylinder bores and crankshaft line boring will be included. This course may be taken a maximum of 2 times. (Formerly AUTO 150)

**Transfer Credit:** CSU

**AUTO 211**

**HIGH PERFORMANCE ENGINES**  5 UNITS

Class hours: 4 lecture/4 lab
Prerequisite: AUTO 140 or AUTO 141 or equivalent with a grade of Credit or “C” or higher.
Recommendation: Appropriate work experience.
This is an advanced course in automotive engine design and high performance engine preparation. Complete disassembly and reassembly of engines will be accomplished. This course will include flow bench testing of cylinder heads and the operation of the engine dynamometer. This course may be taken a maximum of 2 times. (Formerly AUTO 224)

**Transfer Credit:** CSU

**AUTO 212**

**AUTOMOTIVE SPECIALTY**  2 UNITS

Class hours: 6 lab
Prerequisite: AUTO 210 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course is designed to further increase the skill and knowledge of the student in areas of his/her choice, working to trade standards. This course may be taken a maximum of 3 times. (Formerly AUTO 245L)

**Transfer Credit:** CSU

**AUTO 260**

**ADVANCED ELECTRICAL SYSTEMS**  4 UNITS

Class hours: 3 lecture/3 lab
Prerequisite: AUTO 160 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This is a theory/practical course in the automotive body electrical system, covering all classes of electrical components and repairs. (Formerly AUTO 223)

**Transfer Credit:** CSU

**AUTO 280**

**DIAGNOSTIC ENGINE PERFORMANCE**  4 UNITS

Class hours: 3 lecture/3 lab
Prerequisite: None.
Recommendation: AUTO 100 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This is a theory/practical course in diagnosing automotive drivability problems. Areas such as ignition, carburetion, automotive computers, electronic engine controls and on-board diagnostic systems will be included. This course may be taken a maximum of 2 times. (Formerly AUTO 243)

**Transfer Credit:** CSU

**AUTO 281**

**EMISSION CONTROL SYSTEMS - 1997 STANDARDS**  5 UNITS

Class hours: 4 lecture/4 lab
Prerequisite: None.
Recommendation: AUTO 100 or equivalent with a grade of Credit or “C” or higher.
This course gives the advanced automotive student exposure to the current methods, devices, and manufacturers of automotive emission control systems. It provides the student with an opportunity to obtain an advanced emission specialist technician license. This course may be taken a maximum of 2 times. (Formerly AUTO 170)

**Transfer Credit:** CSU

**BIOLOGY**

(Science/Engineering/Math Division)

**BIO 100**

**NATURAL HISTORY OF SO. CALIFORNIA**  1 UNIT

(Also listed as GEOL 100)
Class hours: Total of 9 hours lecture with the minimum equivalent of 4 one-day field trips.
Prerequisite: None.
This is a field trip and seminar class in Biology and Geology of selected areas in So. California. Minerals, geology, landforms, plants, animals, ecology, human use, and recreation value will be studied. This course may be taken a maximum of 2 times.

**Transfer Credit:** CSU

**BIO 105**

**MAN AND ENVIRONMENT**  3 UNITS

Class hours: 3 lecture
Recommendation: Satisfactory completion of the English Placement Process for ENGL 100 clearance or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is designed to help both science and nonscience majors to develop a better understanding of some of the important environmental problems facing mankind. The nature and implications of subjects such as loss of genetic variability, pollution problems, overpopulation, and the use and abuse of natural resources, will be studied. There will be an emphasis on the interrelatedness of these problems and how an understanding of environmental principles can help us to live on this planet more intelligently and more successfully.

**Transfer Credit:** CSU; UC*

*UC credit limits may apply. No credit for BIO 110 if taken after BOT 120.

**BIO 110**

**CALIFORNIA ANIMALS AND PLANTS**  3 UNITS

Class hours: 2 lecture/3 lab or field work
Prerequisite: BIO 120 or equivalent with a grade of Credit or “C” or higher.
Recommendation: None.
The common plants and animals of California are studied with emphasis upon those local forms which can be readily collected or observed. The lecture is designed to familiarize the student with the life history and identification of local species of plants and animals and to aid in the understanding of the relationship of these organisms to their environment. The laboratory and field work emphasize ecological principles and taxonomic identification.

**Transfer Credit:** CSU; UC*

**BIO 115**

**MARINE BIOLOGY**  3 UNITS

Class hours: 2 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This introductory course in marine biology is concerned with the adaptations, ecological relationships, economic importance, and identification of marine animals and plants. Emphasis is on the intertidal and offshore communities of California with frequent field trips to observe live specimens and study the marine environment.

**Transfer Credit:** CSU; UC
BIOL 120  
INTRODUCTION  
TO BIOLOGICAL SCIENCE  4 UNITS  
Class hours: 3 lecture/3 lab  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course is designed for non-biological science majors. It covers basic principles of life science, including cellular biology, the plant and animal kingdoms, ecology, genetics, and evolution. Emphasis is also placed on human biology as it relates to everyday living.  
Transfer Credit: CSU; UC*  
*UC credit limits may apply. No credit for BIOL 120 if taken after 200.

BIOL 180L  
LIFE SCIENCE PREPARATIONS  1 UNIT  
Class hours: 3 lab  
Prerequisite: BIOL 120 or equivalent with a grade of Credit or “C” or higher.  
This course is designed for pre-teaching, life science majors. The student will learn the use and care of laboratory apparatus through actual experience in the classroom. The student will assist the instructor in the laboratory by performing such jobs as helping to prepare demonstrations, designing displays, and aiding individuals in the class. This course may be taken a maximum of 2 times.  
Transfer Credit: CSU

BIOL 200  
(CAN BIOL SEQ A)  
PRINCIPLES OF BIOLOGY  5 UNITS  
Class hours: 3 lecture/2 quiz/4 lab  
Prerequisite: CHEM 111 or equivalent with a grade of Credit or “C” or higher.  
BIOL 120 or ZOOL 120 or BOT 120 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
The course provides a basic survey of major groups of organisms (Kingdoms Monera, Protista, Plants, and Animals) within a context of unifying themes of evolution and ecology. Emphasis will be on structure and function or organisms with consideration given to phylogeny, taxonomy, adaptations, and interactions among organisms and their environment. Animal behavior and select vertebrate organ systems will be included. This course is designed as one semester of a two part series (coordinating with BIOL 201) for biology/medical majors.  
Transfer Credit: CSU; UC

BIOL 201  
(CAN BIOL SEQ A)  
PRINCIPLES OF BIOLOGY  5 UNITS  
Class hours: 3 lecture/2 quiz/4 lab  
Prerequisite: CHEM 111 or equivalent with a grade of Credit or “C” or higher.  
BIOL 120 or ZOOL 120 or BOT 120 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course is designed to facilitate the learning of biological principles and techniques through individualized and mediated instruction. It is open to any student enrolled in any biology course. (Formerly BIOL 9T, CHEM 9T)

BIOL 202  
MOLECULAR BIOLOGY/GENETICS  4 UNITS  
Class hours: 4 lecture  
Prerequisite: BIOL 201 and CHEM 211 or equivalent with grades of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
Biology 202 is an extension of the study of molecular biology, cell biology and genetics introduced in BIOL 201. This course examines the structure and function of nucleic acids and proteins in the living cell, as well as how these molecules are studied and manipulated in the laboratory. Topics include regulation of gene expression, recombinant DNA technology, chromosome mapping and viral and prokaryotic genetics.  
Transfer Credit: CSU; UC

BIOL 250L  
SPECIAL TOPICS IN BIOLOGY  1 UNIT  
Class hours: 3 lab  
Prerequisite: BIOL 120 or equivalent with a grade of Credit or “C” or higher.  
This course is designed primarily for biological science majors. Individual research problems are explored using materials, equipment, and techniques not available to larger classes. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU, UC credit determined after admission

NON CREDIT (ADULT EDUCATION) CLASS  
AED 90.1  
SUPERVISED SCIENCE TUTORIAL  0 UNIT  
Class hours: 2 lab  
Open entry/open exit  
Prerequisite: None.  
Corequisite: Enrollment in any biology course. 

Announcement of Courses

BOTANY  
(Science/Engineering/Math Division)  
BOT 120  
INTRODUCTION  
TO PLANT SCIENCE  4 UNITS  
Class hours: 2 lecture/6 lab  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This is a basic course in plant biology designed not only to introduce the student to plants, but also to cover in some depth many of the facets of botany. Included will be plant cell biology and chemistry, a survey of major plant groups and their life cycles and characteristics, plant ecology and evolution. The course will help prepare students for a life science major, but it can also be taken to fulfill a lab science requirement in general education. Four field trips to examine local plant communities are part of the class. Students will also conduct a research project, prepare a scientific paper, and make a poster presentation based on their project.  
Transfer Credit: CSU; UC

BUSINESS ACCOUNTING  
(Business Division)  
BUSA 1T  
(Not degree applicable)  
ACCOUNTING  
MICROCOMPUTER TUTORIAL  0.5 UNIT  
Class hours: 2 lab  
Prerequisite: None.  
Corequisite: Enrollment in one or more Business Accounting (BUSA) or Business Finance (BUSF) course(s).  
Recommendation: None.  
This course is designed to provide individual tutorial instruction for students studying computerized accounting to facilitate and reinforce their ability to complete assigned computerized projects. This course may be taken a maximum of 4 times. This course is offered on a credit/no credit basis only.
Announcement of Courses

BUSA 2T (Not degree applicable)
ACCOUNTING TUTORIAL 0.5 UNIT
Class hours: 2 lab
Prerequisite: None.
Corequisite: BUSA 100, BUSA 101, or BUSA 102.
Recommendation: None.
This course is designed to provide individualized tutorial instruction with assigned problems and practice sets for introductory accounting students. This course may be taken a maximum of 4 times. This course is offered on a credit/no credit basis only.

BUSA 51
VOLUNTEER INCOME TAX ASSISTANCE 1.5 UNITS
Class hours: 1 lecture/1.5 lab
Prerequisite: BUSA 61 or BUSA 250 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is designed to give students the knowledge and skills necessary to prepare simple federal income tax returns, on a volunteer basis, to low-income and disadvantaged members of the community. With the guidance of the instructor and Internal Revenue Service agents, students will gain experience in interviewing techniques and will apply skills learned in tax preparation while providing a much-needed service to their community.

BUSA 60
QUICKBOOKS ACCOUNTING 2 UNITS
Class hours: 1.5 lecture/2.0 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces QuickBooks 6.0, a complete accounting software system for small businesses.

BUSA 61
TURBO TAX ACCOUNTING 2 UNITS
Class hours: 1.5 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces personal income tax preparation using Turbo Tax for Windows, a software package for preparing individual income tax returns.

BUSA 100
INTRODUCTION TO ACCOUNTING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.

This accounting course introduces the theory and practice of double entry accounting. Emphasis will be placed upon understanding the basic financial records and forms and applying elementary accounting procedures.

BUSA 101 
(CAN BUS SEQ A) (CAN BUS 2) FUNDAMENTALS OF ACCOUNTING I 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 100 or equivalent with a grade of Credit or “C” or higher.
This course covers the basic concepts used by businesses for financial accounting. The course includes a study of: the accounting concepts and techniques essential to the administration of a business enterprise; measuring and communicating economic information; analyzing and recording financial transactions; and the preparation of financial statements for sole proprietorships, partnerships, and corporations.
Transfer Credit: CSU

BUSA 102 
(CAN BUS SEQ A) (CAN BUS 4) FUNDAMENTALS OF ACCOUNTING II 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 101 or equivalent with a grade of Credit or “C” or higher.
This course covers the basic concepts used by businesses for managerial accounting. The course includes a study of: managerial accounting concepts and systems; job order cost systems; analyses for managerial decision making; planning; and control techniques and principles.
Transfer Credit: CSU; UC

BUSA 130
PAYROLL TAX ACCOUNTING 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSA 100 or BUSA 101 or equivalent with a grade of Credit or “C” or higher.
This course will cover fundamental principles of payroll tax laws as defined by Federal, State, and local government. It will also include discussion of Social Security, Federal and State income taxes, Federal and State Unemployment Insurance, Workmen’s Compensation Insurance, and journal entries to record payroll information. It will include sales tax requirements in record keeping and computation of sales tax returns. Insurance and union reporting are discussed. It also includes personnel records requirements, data processing, and payroll systems. It is intended to provide the business students with a working knowledge of current tax laws and practical application of the same.
Transfer Credit: CSU

BUSA 131
COMPUTERIZED ACCOUNTING-IBM 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 100 or BUSA 101 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This course is designed to develop a working knowledge of basic accounting systems using an IBM compatible microcomputer and IBM compatible software. The accounting functions covered will include structuring the chart of accounts; journalizing; posting to the general ledger, accounts receivable, and accounts payable subsidiary ledgers; the structure and preparation of financial statements. In addition, forecasting, budgeting, billing, cash, inventory and payroll modules will be utilized. This course will give students practical experience on the IBM compatible microcomputer.
Transfer Credit: CSU

BUSA 133
SPREADSHEET ACCOUNTING I 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This course is designed to teach students the application of accounting functions using the IBM compatible microcomputer and standard spreadsheet software. The accounting functions will include the development of financial statements, worksheets, special journals, payroll, bank reconciliations, and personal budgeting.
Transfer Credit: CSU

BUSA 134
SPREADSHEET ACCOUNTING II 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSA 101 and BUSA 133 or equivalent with grades of Credit or “C” or higher.
Corequisite: BUSA 1T.
This course is designed to teach students the application of accounting functions using the IBM compatible microcomputer and spreadsheet accounting software. The accounting concepts will include corporation financial statements, financial ratios, manufacturing accounting, plant assets, accounts and notes receivable, inventory valuation, notes payable, budgeting, and forecasting utilizing generally accepted accounting principles.
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

185
Announcement of Courses

BUSA 171
BUSINESS ACCOUNTING
OCCUPATIONAL WORK EXPERIENCE 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Accounting Occupational Work Experience, in a declared business major. One unit of Business Accounting Occupational Work Experience requires 60 non-paid hours or 75 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

BUSA 173/174
BUSINESS ACCOUNTING
OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: 1 hour/week coordination class.
Corequisite: Enrollment in 7 or more units, including Occupational Work Experience, in a declared business major. Each 75 hours of paid work equals one semester credit of credit at the training site.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 4 times.
Transfer Credit: CSU

BUSA 172
BUSINESS ACCOUNTING
OCCUPATIONAL WORK EXPERIENCE 2 UNITS
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Accounting Occupational Work Experience, in a declared business major. Two units of Business Accounting Occupational Work Experience require 120 non-paid hours of work or 150 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.
Transfer Credit: CSU

BUSA 201
INTERMEDIATE ACCOUNTING I 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 102 or equivalent with a grade of Credit or “C” or higher.
This course covers the preparation of accounting statements and the study of accounting theory, utilizing the corporation form of business organizations. The emphasis of the course is on the sequential study of the various classifications and items of the balance sheet, including current and non-current assets.
Transfer Credit: CSU

BUSA 202
INTERMEDIATE ACCOUNTING II 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 201 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of BUSA 201. It is an in-depth study of the balance sheet items relating to non-current assets, current liabilities, long-term liabilities, paid-in capital and retained earnings. The course includes techniques of comparative analysis; interpretation and projection of financial statements, funds-flow and cash-flow reporting; and the study of A.P.B.'s (Accounting Principles Board Bulletins) and E.A.S.B.'s (Financial Accounting Standard Board pronouncements).
Transfer Credit: CSU

BUSA 230
ADVANCED PAYROLL ACCOUNTING 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSA 130 or equivalent with a grade of Credit or “C” or higher.
Corequisite: BUSA 1T.
Recommendation: None.
This course is designed to build on the basic payroll knowledge and skills gained in the Payroll Tax Accounting course. It covers advanced topics in payroll systems analysis, payroll administration, accounting for cafeteria plans, flexible spending accounts, tax deferred savings accounts and retirement plans. Taxation of fringe benefits, health, accident and disability benefits, and expatriot payments are explored. Methods of developing compensation plans are also discussed. This course is applicable to those students who plan to take the Certified Payroll Professional examination sponsored by the American Payroll Association.
Transfer Credit: CSU

BUSA 231
CURRENT TOPICS IN PAYROLL ACCOUNTING 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to give payroll accounting students exposure to experts in federal and state payroll tax law, Workers’ Compensation Insurance, union payroll, labor and fair employment law, sales taxes and payroll administration. The course is structured as a current topics seminar with guest speakers from the legal field, the Internal Revenue Service, the Franchise Tax Board, the State Board of Equalization, the Employment...
Announcement of Courses

Development Department, The California Society of Certified Public Accountants, and Certified Payroll Professionals. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

BUS 240
COST ACCOUNTING 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 100 or BUSA 101 or equivalent with a grade of Credit or "C" or higher.
This course covers the various methods of cost accounting in use by manufacturing concerns. The details of accounting for materials, labor, and manufacturing overhead costs and expenses are presented. A study is made of the use of job order cost systems, process cost systems, and standard cost systems. The related areas of budgeting, break-even, and profit-volume analyses by management are included. A practice set is used. A practice set is used.

Transfer Credit: CSU

BUS 241
MANAGERIAL ACCOUNTING 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BUSA 101 and BUSA 102 or equivalent with grades of Credit or "C" or higher.
This course introduces the managerial accounting concepts and principles that will enable the student to understand managerial accounting as it is applied in serving management needs. Topics include: fundamentals of managerial accounting; managerial accounting concepts and systems; managerial accounting planning and control; accounting for decentralized operations; analyses for decision making; modern uses of managerial accounting.

Transfer Credit: CSU

BUS 250
INCOME TAX ACCOUNTING 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSA 100 or BUSA 101 or equivalent with a grade of Credit or "C" or higher.
This course is a practical study of the current Federal revenue acts as they relate to business and individual income tax procedures. It includes income inclusions and exclusions, exemptions, capital gains and losses, and business and individual deductions. This course reflects the tax laws of the Tax Reform Act of 1986, Public Law 99-514 of October 22, 1986.

Transfer Credit: CSU

BUS 251
ADVANCED INCOME TAX ACCOUNTING 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSA 250 or equivalent with a grade of Credit or "C" or higher.
This will be a continuation of BUSA 250 and will cover taxpayers other than individuals. It is designed to fill the needs of the student who desires knowledge of the Federal Income Tax implications of partnerships, corporations, tax option corporations and a general overview of estates, trusts, and gift taxation. This course reflects the tax laws of the Tax Reform Act of 1986: Public Law 99-514.

Transfer Credit: CSU

BUS 270
FUNDAMENTALS OF AUDITING 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSA 202 or equivalent with a grade of Credit or "C" or higher.
This course covers the process of examining and evaluating financial conditions and records. It is designed to provide a basis for an opinion concerning the reliability of the records, as evidenced by a written audit report.

Transfer Credit: CSU

BUS 280
ADVANCED ACCOUNTING 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSA 202 or equivalent with a grade of Credit or "C" or higher.
This class covers partnership and joint venture accounting, installment sales, consolidated financial statements, bankruptcy, accounting for trusts and estates, and government and non-profit accounting.

Transfer Credit: CSU

BUSINESS FINANCE
(Business Division)

BUS 50
ELECTRONIC CALCULATORS/ BUSINESS APPLICATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to teach students how to properly operate electronic calculators. Students will learn how electronic display calculators work, how to properly enter data using the ten-key keyboard, and how electronic calculators are used in business to solve practical problems. Techniques learned in this class can be applied to data processing and accounting classes.

Transfer Credit: CSU

BUS 51
RETIREMENT PLANNING AND INVESTING 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces methods of computing amounts to be saved and invested in order to fund retirement. The course also discusses various retirement plans available. Additionally, students will learn techniques to research and evaluate mutual fund investment opportunities.

BUS 52
BUSINESS MATHEMATICS FOR ACCOUNTING APPLICATIONS 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to teach students basic mathematical calculations used in business, finance, and accounting and introduces them to the IBM compatible computer and standard spreadsheet software. Topics covered include fractions and percentages, sales and purchasing cycles, sales tax, markdowns and markups, simple and compound interest, and finance charges.

BUS 125
PERSONAL FINANCE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This survey course will cover the following topics: the management of personal income and expenditures; commercial and savings accounts; budgets; installment buying; and borrowing money; property, income, estate, inheritance, and gift taxes; life, health, accident and property; and miscellaneous insurance; pension plans and social security; owning a home; investing in securities and trust funds; and wills. This course can be taken in either a traditional or an on-line learning environment.

Transfer Credit: CSU

BUS 126
INTRODUCTION TO STOCK MARKET AND INVESTMENTS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course will cover the following subject areas: how to invest in the stock market; the various kinds of stocks, bonds, warrants, and rights; investment objectives; investment systems; the Broker's part in investment; stock

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
BA 50
MATH FOR BUSINESS AND FINANCE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed for management majors.
Prerequisite: None.
Class hours: 3 lecture
Corequisite: None.
This course covers statutes, ordinances, rules, regulations, and orders that influence operations of the industry being studied. The student will become familiar with various agencies operating in the areas which regulate labeling, environment, sanitation, advertising, weights and measures, pricing, and labor laws.
Recommendation: None.
Corequisite: None.
Prerequisite: None.
Class hours: 3 lecture
BA 51
LEGAL ASPECTS OF MANAGEMENT 3 UNITS
Prerequisite: None.
Class hours: 3 lecture
Corequisite: None.
Prerequisite: None.
Class hours: 3 lecture
BA 52
FUNDAMENTALS OF IMPORTING AND EXPORTING 3 UNITS
Prerequisite: None.
Corequisite: None.
Prerequisite: None.
Class hours: 3 lecture
BA 53
RETAIL DISPLAY 3 UNITS
Prerequisite: None.
This course covers principles and methods of arranging windows, wall cases, floor cases, and open displays in a pleasing merchandising manner. It also covers the principles of design, the use of color, fashion coordination, and seasonal promotion as they relate to objectives of a retail establishment.
BA 54
INVENTORY MANAGEMENT 3 UNITS
Prerequisite: None.
This course introduces the student to the principles and concepts of Inventory Management. Control of inventory stresses the importance of inventory as well as Inventory Management’s relationship with other business functions. This course is designed to assist the student to pass the APICS (American Production and Inventory Control Society) certification examination.
BA 55
INTRODUCTION TO LOGISTICS 3 UNITS
Prerequisite: None.
This course introduces the student to the principles and concepts of Logistic functions. Class lectures will cover the total product flow from the inbound raw materials to the outbound finished goods. Logistics activities to be discussed will be warehousing, transportation, inventory management and materials handling.
BA 56
JUST-IN-TIME INVENTORY MANAGEMENT 3 UNITS
Prerequisite: None.
This course trains the student to determine the possibility of starting a home-based business. The process of starting and operating a home-based business is included in this course.
BA 57
MASTER SCHEDULING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course trains the student in the various techniques used by marketing and manufacturing to anticipate and control customers’ demand against the company’s build plan. This course prepares the student for the national certification examination conducted by APICS (American Production and Inventory Control Society).
BA 58
HOME-BASED BUSINESS 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course explores the factors that determine the possibility of starting a home-based business. The process of starting and operating a home-based business is included in this course.
BA 59
NMA ROLE OF THE SUPERVISOR 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course explores the course explores the factors that determine the possibility of starting a home-based business. The process of starting and operating a home-based business is included in this course.
BA 60
NMA MANAGEMENT PRINCIPLES 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
This course explores the factors that determine the possibility of starting a home-based business. The process of starting and operating a home-based business is included in this course.
BA 67
NMA COMMUNICATION SKILLS  1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to present practical ideas and tools for managers, supervisors, and team leaders; build a foundation of management concepts that will prepare the participant for further studies; and help each student develop a positive and constructive philosophy of management.

BA 68
NMA INTERPERSONAL RELATIONSHIP SKILLS  1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will equip people with communication skills and concepts that will make them more effective as leaders, supervisors, and managers. It deals with basic communication concepts demonstrated useful for leaders and managers at all levels. This course includes the oral communication skills (talking and listening) and the written skills (reading and writing).

BA 69
NMA DEVELOPING PERFORMANCE  1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on the development of excellence in performance. It deals with various facets of individual, team, and work units performance of concern to managers, supervisors, and team leaders in various types of business organizations. This course addresses contemporary approaches and concepts, such as, reengineering, empowerment, and a useful system for managing performance.

BA 75
NMA NEW EMPLOYEE  1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on how to work effectively with a new employee resulting in substantial returns in performance, loyalty, and cooperation within the organization.

BA 76
NMA COACHING/COUNSELING  1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course emphasizes the manager’s role in the development of an employee. It shows how managers coach and counsel employees effectively. It also teaches the manager nonjudgmental communication and how to actively listen and provide feedback.

BA 77
NMA LEADERSHIP DEVELOPMENT  1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to help a student understand and develop an awareness of a leader’s role; improve leadership skills at all levels; establish leadership ideals and develop the qualities needed to achieve them; understand leadership styles and increase a person’s capability to respond accordingly; and develop strategies for effectiveness as a leader.

BA 78
NMA BUSINESS CONCEPTS  1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers the basic business concepts that are essential to successfully understand how a business operates. It includes an understanding of the nature of a business and how information effectively flows through the organization. It also discusses how the economic system impacts an individual business.

BA 79
NMA LAW FOR THE SUPERVISOR  1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide those in supervision with a background of law that is pertinent to their business context. Emphasis is on understanding law’s impact on the supervisor instead of the learning of specific legal terminology.

BA 100
FUNDAMENTALS OF BUSINESS  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course, designed for the beginning business student, will survey business principles, problems, practices, and procedures as they pertain to the societal challenges facing business and the economic challenges facing America. Business topics will be discussed, such as: the nature of business, ownership, recruitment and training of personnel, labor-management relations, production and distribution of goods, competition, profits, transportation, finance, managerial controls, government, and business relations.

BA 101
INTERNATIONAL BUSINESS  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a survey of the factors, problems, and techniques involved in conducting business in the market places of the world and includes an overview of economic, political, geographic, and social factors that affect business transactions abroad.

BA 102
INTERNATIONAL BUSINESS LAW  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course introduces the student to various human characteristics and differences which exist in world-wide business environments. Communication styles, business ethics, mannerisms, numbers, space, and political
and religious beliefs will be highlighted as to their importance in establishing viable and profitable contacts between individuals, cultures, and nations.

Transfer Credit: CSU

BA 105
PERSONNEL-POLICY AND PROCEDURES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to provide the student with an in-depth probe of personnel from an administrative role. It includes the implementation of compliance with governmental regulations and laws.
Transfer Credit: CSU

BA 106
HUMAN RESOURCE MANAGEMENT 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to acquaint the student with the principles and methods related to the effective utilization of personnel in the business organization. It will develop relations involved in recruitment, selection, placement, training, and supervision of employees. It will also include an introduction to the organized labor movement and current labor relations conditions.
Transfer Credit: CSU

BA 107
HUMAN RELATIONS IN BUSINESS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to aid future employees and employers to understand and utilize human relations concepts as they apply to the business environment. It will cover such areas as morale, personal efficiency, leadership, personality, motivation, and communication.
Transfer Credit: CSU

BA 108
LABOR MANAGEMENT RELATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is an introductory course in labor-management relations for supervisors and union shop stewards. It focuses on collective bargaining and the functions of management, unions and labor agreements. An in-depth study will be made of the Labor Management Relations Act as amended, the National Labor Relations Board, and the Landrum-Griffin Act. Special attention is given to grievance procedures and arbitration cases. Negotiations of a collective bargaining agreement will be simulated.
Transfer Credit: CSU

BA 110
ADVERTISING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers the study of magazine, newspaper, radio, billboard, direct mail, and other special forms of publicity. Problems of space, type, copy, and the preparation of the complete layout are discussed. The principles of effective techniques with ample practice in the preparation of different types of advertisements will be covered.
Transfer Credit: CSU

BA 113
LEGAL ENVIRONMENT OF BUSINESS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a course that provides a meaningful portrayal of the operation and interaction of public and private law in the political and socio-economic environment. This is achieved by the study of the state and federal legal system and the laws that regulate the business organizations.
Transfer Credit: CSU; UC*
*UC credit limits may apply. BL 110, BL 111, and BA 113 combined: maximum credit, one course.

BA 114
MARKETING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers problems and organizations of systems of distributing goods and services in our business world. It will include promotion through retail and wholesale parallels, consumer buyer habits, pricing, budgeting, transportation, warehousing, sources and uses of marketing information, and marketing of agricultural products.
Transfer Credit: CSU

BA 115
MANAGEMENT—BUSINESS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course will cover the principles and techniques in the management of business. It includes organizing, planning, controlling, directing, and the application of management principles to business organizations.
Transfer Credit: CSU

BA 117
INTRODUCTION TO SUPERVISION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
An introductory course focusing on the leadership skills and responsibilities required of supervisors in industry, business, and government agencies. Topics to be explored will include effective communication practices, training and evaluation of employees, management systems organization, and delegation of responsibilities. Class demonstration of leadership skills. Designed for in-service supervisors and pre-supervisor education.
Transfer Credit: CSU

BA 118
MANAGEMENT—RETAILING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to meet the needs of retail store managers and help prepare students for positions in retail store management. Topics covered: organizational structure, merchandise planning and control, sales promotion, pricing, and expense management.
Transfer Credit: CSU

BA 119
MANAGEMENT—SUPERMARKET 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to meet the needs of students in supermarket management by acquainting the student with the management functions of planning, organizing, staffing, directing, controlling, innovating, and representing as they apply to the supermarket.
Transfer Credit: CSU

BA 120
MANAGEMENT—ACCOUNTING AND INTERNAL CONTROL 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
The accounting cycle will be introduced with emphasis on understanding financial records. Instruction will be given on the internal control of the industry being studied as well as an introduction to the analysis of the financial statements.
Transfer Credit: CSU

BA 121
SALES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers opportunities in selling,
development of desirable personality traits, methods of approach to prospective customers, the art of demonstrating goods, how to meet objections, and how to close the sale.  

Transfer Credit: CSU

BA 123  
FUNDAMENTALS OF RETAILING  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is designed to help the student develop an understanding of the problems, policies, and methods of merchandising as carried on in retail stores. Topics covered: careers in retailing, store layout, pricing goods, buying and receiving of merchandise and customer services.  

Transfer Credit: CSU

BA 132  
COMPUTER APPLICATIONS FOR MANAGERS  3 UNITS  
Class hours: 3 lecture/1 hr. arr.  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This survey course focuses on the business management processes and the software products that are available to assist managers, entrepreneurs, and other business professionals in the successful accomplishment of their demanding jobs in a dynamic, global, and technology-driven business environment. The course is designed to review the latest software available to assist managers in accomplishing the full spectrum of management functions to help them shift from old methods of managing to new methods using tools provided by computer technology.  

Transfer Credit: CSU

BA 149  
CURRENT MANAGEMENT THEORY  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is an introduction to TQM (Total Quality Management) and other current management theories. The ideas of prominent management consultants will be reviewed, discussed, and analyzed. These theories will be compared as to how they can be applied.  

Transfer Credit: CSU

BA 153  
SMALL BUSINESS MANAGEMENT  3 UNITS  
Class hours: 3 lecture +1 hr. lab arr.  
Prerequisite: None.  
This course is designed to acquaint the student with the knowledge of principles, procedures, and opportunities in small business management. It covers such topics as entrepreneurial opportunities, developing a business plan, marketing, operations, and financial management. It briefly covers the practical aspects of record keeping, planning, and control.  

Transfer Credit: CSU

BA 155  
INTRODUCTION TO GLOBAL LOGISTICS  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: BA 101 or equivalent with a grade of Credit or “C” or higher.  
In this course students analyze the international environment, learn about logistics systems, and learn the correct control procedures to monitor its success. Students learn the factors involved in bringing new products to market across numerous regions, using customized design, packaging, and service offerings, while providing for quick-response delivery, linking innovation, and value-added services to product offerings.  

Transfer Credit: CSU

BA 156  
MOTIVATIONAL PRESENTATION SKILLS FOR MANAGERS  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is designed to teach managers how to communicate the values, mission, and goals of the organization to create an environment that encourages motivation on the part of employees. Students learn motivational techniques and presentation skills required to be an effective business leader. Topics also include handling conflict, managing changes, and dealing effectively with stress. Emphasis is on the process of developing presentation materials, planning presentations, and using the latest communication technology with which to deliver professional, compelling presentations.  

Transfer Credit: CSU

BA 171  
BUSINESS ADMINISTRATION WORK EXPERIENCE  1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: Enrollment in 7 or more units, including Business Administration Occupational Work Experience, in a declared business major. One units of Business Administration Occupational Work Experience requires 60 non-paid hours of work or 75 paid hours of work per semester.  

Transfer Credit: CSU

BA 172  
BUSINESS ADMINISTRATION OCCUPATIONAL WORK EXPERIENCE  2 UNITS  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: Enrollment in 7 or more units, including Business Administration Occupational Work Experience, in a declared business major. Two units of Business Administration Occupational Work Experience require 120 non-paid hours of work or 150 paid hours of work per semester.  

Recommendation: None.  
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 3 times.  

Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
BA 173/174  
**BUSINESS ADMINISTRATION**  
**OCCUPATIONAL WORK EXPERIENCE**  
3-4 UNITS  
Class hours: 1 hour/week coordination class.  
Corequisite: Enrollment in 7 or more units, including Business Administration Occupational Work Experience, in a declared business major. Three units of Business Administration Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Administration Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester. Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.  
First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.  
Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 4 times.  
**Transfer Credit: CSU**  

**BA 174A**  
**BUSINESS ADMINISTRATION**  
**OCCUPATIONAL WORK EXPERIENCE ALTERNATE PLAN**  
4 UNITS  
Class hours: 1 hour/week coordination class.  
Prerequisite: Completion of 12 units in Business Administration, Business Real Estate or Paralegal or equivalent.  
Corequisite: None.  
Recommendation: None.  
The Business Administration Occupational Work Experience Alternate Plan is supervised employment of students designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student’s educational goals. Up to eight (8) units may be earned in one semester. Occupational work internship is supervised employment of students designed to extend their classroom-based occupational learning at an on-the-job learning station in fields directly related to their educational or occupational goals. This course may be taken a maximum of 4 times.  
**Transfer Credit: CSU**  

**BA 200**  
**PRINCIPLES OF BANKING**  
3 UNITS  
Class hours: 3 lecture.  
Prerequisite: None.  
This is an introductory course in commercial banking. It will deal with issues, subjects, and situations bankers encounter today. The topics covered will include: negotiable instruments, deposits, payments, personnel, data handling, loan functions, bank services, and management of assets.  
**Transfer Credit: CSU**  

**BA 201**  
**MONEY AND BANKING**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This is an introductory course whose principal objective is to explain how our modern monetary institutions can best meet the needs of society. Topics covered are monetary theory, money creation, flow, controls, national policy, and international factors. The questions of how fiscal and monetary policies may help us solve our problems will be thoroughly examined.  
**Transfer Credit: CSU**  

**BA 202**  
**BUSINESS COMMUNICATION**  
(Not degree applicable)  
3 UNITS  
Class hours: 3 lecture.  
Prerequisite: None.  
This course introduces students to the principles and techniques of effective communication and public speaking.  
**Transfer Credit: CSU**  

**BA 203**  
**MANAGEMENT—DEPARTMENT OPERATIONS**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is designed to provide the student with an awareness and appreciation of staff-supported activities in an organization. The inter-reaction of the various departments and the work flow are analyzed for the purpose of developing a cooperative attitude among personnel of the various departments.  
**Transfer Credit: CSU**  

**BA 206**  
**PRODUCTION ACTIVITY CONTROL**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course trains the student in the commonly known and accepted manufacturing principles and practices of production controls. Production control objectives are developed for controlling input, output, measurement, and corrective actions. Scheduling techniques, records, routings capacity, and load criteria as well as production releases and shortages are taught. This class prepares the student to pass the national certification examination conducted by APICS (American Production and Inventory Control Society).  
**Transfer Credit: CSU**  

**BA 207**  
**CAPACITY MANAGEMENT**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course prepares the student to establish the interrelationship of capacity management to the total production and inventory management systems of a company. Capacity management also addresses the problem of planning and controlling various capacities of the industrial firm. Capacity management is the process of determining the necessary resources (land, facilities, money, equipment, work force) to meet the production objectives of the firm. This class prepares the student to pass the national certification examination conducted by APICS (American Production and Inventory Control Society).  
**Transfer Credit: CSU**  

**BUSINESS COMMUNICATION**  
(Not degree applicable)  
3 UNITS  
Class hours: 3 lecture.  
Prerequisite: None.  
This course will help students develop written reports and other types of communication such as letters and surveys unique in the management field. They will learn the mechanics such as word usage and spelling related to a particular industry. Students will develop telephone and dictation techniques.  

**BCOM 45**  
**EFFECTIVE COMMUNICATION FOR MANAGERS**  
3 UNITS  
Class hours: 3 lecture.  
Prerequisite: None.  
This course reviews the fundamentals of grammar, sentence structure, punctuation, capitalization, spelling, and business vocabulary building. Completion of the course fulfills 54 hours of the English requirement for the Court Reporting Certification.  

**BCOM 51**  
**BUSINESS ORAL COMMUNICATION**  
1.5 UNITS  
Class hours: 1.5 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course focuses on the importance of
good oral communication skills for success in business. It provides practice for developing speaking and listening skills within the business environment for careers in selling, marketing, and management.

**BCOM 147**  
**BUSINESS COMMUNICATIONS**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: BCOM 46 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: BCOM 151 and ENGL 100 or equivalent with grades of Credit or “C” or higher.  
This course integrates instruction and practice in business writing. The emphasis is on modern structure, style, vocabulary, grammar, and logical organizational patterns. The course content emphasizes memos and letters, reports, career communications, oral communication, global and multicultural issues, legal and ethical situations, and communication technology. This course can be taken in a traditional classroom setting or in an online learning environment.  
*Transfer Credit: CSU*

**BCOM 148**  
**EFFECTIVE BUSINESS PRESENTATIONS**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: BCOM 46 or ENGL 52 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the English Placement Process.  
This course is designed to develop those communication skills necessary to present effective written and oral business briefings and reports. It stresses the need to write and speak clearly, cohesively, concisely, and convincingly. Students will structure reports, both orally and written, on topics about which they are knowledgeable.  
*Transfer Credit: CSU*

**BCOM 150**  
**INTERNATIONAL BUSINESS COMMUNICATION**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: BCOM 147 or ENGL 100 or equivalent with a grade of Credit or “C” or higher.  
This course covers issues and skills that are crucial to effective intercultural communication in business. The most significant issues pertaining to cross-cultural interaction are examined. Practical guidelines and information on how to conduct negotiations across countries, as well as general dos and don’ts in international business are covered.  
*International business writing styles, formats, and content for letters, reports, resumes, presentations, and other miscellaneous business documents are emphasized.*  
*Transfer Credit: CSU*

**BCOM 151**  
**COMPUTER APPLICATIONS/BUSINESS DOCUMENTS**  
1 UNIT  
Class hours: 1 lecture/.5 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Concurrent enrollment in one of the following courses: BCOM 45, 147, 148, 150, or 152.  
This course reinforces the critical writing skills involved in preparing effective business messages through hands-on experience in using the microcomputer. Students will use primary-computer-applications skills in word processing, spreadsheet, data management, graphics, and desktop publishing to solve communication problems in the production of typical business documents, including letters, memoranda, reports, resumes, and proposals. The applications in this course are carefully designed to correlate with the content coverage of primary business communication texts.  
*Transfer Credit: CSU*

**BCOM 152**  
**JOB SEARCH IN THE BUSINESS FIELD**  
1.5 UNITS  
Class hours: 1.50 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Completion of or near completion of any certificate or AA degree in the Business Division.  
This course prepares business students for the job search process. It emphasizes job search tools, techniques, and procedures for researching the labor market; health and image professional development; writing strategies for resumes, cover letters, and thank-you letters; and understanding human relations in job adjustment. This course may be taken a maximum of 2 times.  
*Transfer Credit: CSU*

**BCOT 5A** (Not degree applicable)  
**WORD MODULE**  
0.5 UNIT  
Class hours: .33 lecture/.56 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Fluency in Spanish is strongly recommended.  
This course instructs the students, in a bilingual mode (Spanish), in the use of microcomputers within the business environment using the Microsoft Window interface and the Microsoft Office Professional application suite (Word, Excel, Access, and PowerPoint). Students learn basic aspects of microcomputer software applications using a modular approach. This module will include topics in file management, creation/maintenance of backups, formatting disks, and the basic concepts and use of a word processing application. This course may be taken a maximum of 1 time.

**BCOT 5B** (Not degree applicable)  
**EXCEL MODULE**  
0.5 UNIT  
Class hours: .33 lecture/.56 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Fluency in Spanish is strongly recommended.  
This course instructs the students, in a bilingual mode (Spanish), in the use of microcomputers within the business environment using the Microsoft Window interface and the Microsoft Office Professional application suite (Word, Excel, Access, and PowerPoint). Students learn basic aspects of microcomputer software applications using a modular approach. The module will include topics in file management, creation/maintenance of backups, formatting disks, and the basic concepts and use of a spreadsheet application. This course may be taken a maximum of 1 time.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
BCOT 7T  
INDIVIDUALIZED COMPUTER  
LITERACY SKILLS  
0.5 UNIT  
Class hours: 1.5 lab open entry/open exit  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course increases the business students knowledge of computer technology resources on campus, improves student use of computer technology for successful completion of technology-based course assignments, and improves student confidence in utilizing computer technology. Special attention will be given to skills necessary for success in distance education courses. This course is offered on a credit/no credit basis only.

BCOT 50  
ADVANCED WORDPERFECT  
FOR WINDOWS  
3.5 UNITS  
Class hours: 3 lecture/2 lab  
Prerequisite: BCOT 108 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: Concurrent enrollment in BCOT 3T.  
This course offers students opportunities to build advanced skills, speed, and problem-solving abilities using WordPerfect for Windows software.

BCOT 51  
ADVANCED MICROSOFT WORD  
FOR WINDOWS  
3.5 UNITS  
Class hours: 3 lecture/2 lab  
Prerequisite: BCOT 112 or equivalent with a grade of Credit or “C” or higher.  
Recommendation: Concurrent enrollment in BCOT 3T.  
This course offers students opportunities to build advanced skills, speed, and problem-solving abilities using Microsoft Word for Windows software.

BCOT 52  
DATA ENTRY  
2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
This course is designed to enable students to develop skill as data entry operators. Students will utilize a full screen data entry terminal. Data will be recorded on diskettes. Students also will be introduced to the microcomputer. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online environment.

BCOT 53  
ADVANCED DATA ENTRY  
2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: BCOT 52 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: Ability to type 30 wpm and familiarity with the microcomputer, email, and email attachments, and to be able to complete assignments in a timely manner.  
This course is designed for additional training and skills for advanced keyboarding and data entry problems. Students will learn to proofread, evaluate, and create a project report reflecting the quality and accuracy of the keyboarding projects. The students will continue to improve data entry skills by working with projects more complex than those encountered in BCOT 52. Data entry jobs will be multi-face utilizing multi-form screen input. Students will utilize a full screen data entry terminal. This course can be taken in a traditional classroom setting or online environment.

BCOT 60  
TELEPHONE TECHNIQUES/ CUSTOMER SERVICE  
1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course teaches the importance of effective telephone techniques in the business office and the correct manner of identifying customer wants and needs.

BCOT 62  
COMPUTER KEYBOARDING  
1 UNIT  
Class hours: 1 lecture/.5 lab  
Prerequisite: None.  
Recommendation: Concurrent enrollment in BCOT 3T.  
This course is designed for data processing and accounting students who do not know how to touch type; executives/managers/operators who use computer work stations; people who seek data entry positions; and users of personal home computers. Touch typewriting of alphabetic, numeric, and symbol keys on computers is emphasized. This course can be taken in either a traditional or an on-line learning environment.

BCOT 63  
KEYBOARDING SPEED/ CONTROL BUILDING  
1 UNIT  
Class hours: 1 lecture/.5lab  
Prerequisite: None.  
Recommendation: Knowledge of keyboard and key strokes. Concurrent enrollment in BCOT 3T.  
This is a nine-week course designed to provide intensive training and practice in typewriting speed and control. The students will work independently toward their respective goals. This course may be taken a maximum of 3 times. This course can be taken in either a traditional or an online environment.  
(Formerly BCOT 135)

BCOT 70  
MEDICAL MACHINE TRANSCRIPTION  
4 UNITS  
Class hours: 4 lecture/2 lab  
Prerequisite: BCOT 61 or BCOT 131, BCOT 162, BCOM 46, and MA 161 or equivalent with grades of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: Concurrent enrollment in BCOT 3T and the ability to type 30 wpm.  
This course prepares students in medical transcription common to a medical office. This course helps students to identify correct terminology, spell and define terms, and prepare appropriate forms. Reports are dictated in different accents, dialects, and gender voices, and are typed using appropriate word processing software to simulate real medical office environments.

BCOT 71  
COMPUTERS IN THE MEDICAL OFFICE  
3.5 UNITS  
Class hours: 3 lecture/2 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: MA 60, MA 161 and concurrent enrollment in BCOT 3T.  
This course prepares students in medical/dental secretary or medical/dental office personnel to work as front office personnel in a health care practice. Students will learn to input patient information, schedule appointments, handle billing, handle insurance claims, and apply computer basics as they relate to the medical office.
BCOT 72
INTRODUCTION TO PERSONAL DIGITAL ASSISTANT 0.5 UNIT
Class hours: .67 lecture/ .33 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to introduce students to the functions of PDAs (Personal Digital Assistants) including PDA basics such as scroll, contrast, power buttons, infrared port, serial connector and the reset button. Students will input data through Graffiti and the onscreen keyboard using the Date book, Address, to DO Memo Pad, and expense applications. Additional topics will include the HotSync (synchronizing) of files between the Desktop application on their personal computer and the PDA. Loading software and adding modules to the PDA will also be covered.

BCOT 80
PROCESSING LAW OFFICE DOCUMENTS 2 UNITS
Class hours: 2 lecture/ 1 lab
Prerequisite: BCOT 108 or BL 57 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student to the correct style for legal documents set by common usage or by court procedure. The specific formats required by law office documents will be emphasized.

BCOT 81
LEGAL OFFICE PROCEDURES 4 UNITS
Class hours: 3 lecture/ 2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course is designed to prepare students for employment as legal secretaries. It emphasizes procedures, preparations of calendars, formatting wills and probates. Students will learn how to document telephone calls, maintain financial records, and perform other secretarial duties relevant to a legal office. This course meets 90 hours of the legal requirements for Court Reporting certification. This course can be taken in a traditional classroom setting or online environment.

BCOT 82
SPANISH LEGAL OFFICE TERMINOLOGY/VOCABULARY 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: SPAN 112 or SPAN 201 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is for the person who has a basic background in the Spanish language and who needs to learn specific field-related terminology and vocabulary for the legal offices that serve Spanish-speaking clients.

BCOT 83
LEGAL OFFICE TERMINOLOGY/ MACHINE TRANSCRIPTION 4.5 UNITS
Class hours: 4 lecture/ 2 lab
Prerequisite: BCOT 61 or BCOT 131, BCOT 162, and BCOM 46 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T and the ability to type 30 wpm.
This course is designed to teach the student legal terminology in order to be able to transcribe and key legal documents. The student will also learn the skills and knowledge necessary for the production of high-quality legal documents through the total transcription concept and for the development of proper machine dictation skills/procedures. The emphasis is on understanding, defining, and using over 900 terms in the legal context; skillful keyboarding; and accurate proofreading to produce quality, finished legal documents on electronic equipment/microcomputers.

BCOT 89
INTERNET AS A BUSINESS COMMUNICATION TOOL 3.5 UNITS
Class hours: 3 lecture/ 2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BCOT 62 and concurrent enrollment in BCOT 3T.
This course is designed to teach students the technological skills necessary to communicate in today’s e-commerce computer-oriented business environment. The course will cover electronic mail (e-mail), desktop publishing for electronic dissemination, Web page design, electronic presentations, and Outlook. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

BCOT 90
MICROSOFT WORD CORE LEVEL 1.5 UNITS
Class hours: 1.5 lecture/ 1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student to word processing functions on the IBM compatible personal computers using Microsoft Word for Windows software. Topics include Core Level MOUS skills for Microsoft Word functions such as creating, printing, and editing word documents, formatting documents, creating and formatting tables, inserting graphic elements; and exploring the Internet. This course prepares the student for Microsoft Office User Specialist (MOUS) Word Core Certification. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

BCOT 99
MICROSOFT EXCEL
CORE LEVEL 1.5 UNITS
Class hours: 1.5 lecture/ 1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student to spreadsheet functions on the IBM compatible personal computers using Microsoft Excel for Windows software. Topics include Core Level MOUS Skills for Microsoft Excel functions such as preparing and formatting an Excel worksheet, maintaining and enhancing a worksheet, moving data within and between workbooks, inserting formulas in a worksheet, creating a chart in Excel, inserting clip art images, and creating maps. This course prepares the student for Microsoft Office User Specialist (MOUS) Excel Core Certification. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
BCOT 93
MICROSOFT EXCEL
EXPERT LEVEL  1.5 UNITS
Class hours: 1.5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course emphasizes advanced spreadsheet functions on the IBM compatible personal computer using Microsoft Excel for Windows software. Topics include Expert Level MOUS Skills for Microsoft Excel functions such as preparing, editing, and formatting a presentation; adding animation; using WordArt and creating organizational charts; adding visual elements; modifying a presentation; importing and exporting data. This course prepares the student for Microsoft Office User Specialist (MOUS) Excel Expert Certification. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

BCOT 96
MICROSOFT POWERPOINT
CORE/EXPERT LEVEL  1.5 UNITS
Class hours: 1.5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student to beginning and advanced presentation functions on the IBM compatible personal computer using Microsoft PowerPoint for Windows software. Topics include Core/Expert Level MOUS Skills for Microsoft PowerPoint functions such as preparing, editing, and formatting a presentation; adding animation; using WordArt and creating organizational charts; adding visual elements; modifying a presentation; importing and exporting data; customizing and creating a slide show; and creating output and delivering presentations. This course prepares the student for Microsoft Office User Specialist (MOUS) PowerPoint Core Certification. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

BCOT 97
MICROSOFT OUTLOOK
CORE LEVEL  1.5 UNITS
Class hours: 1.5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student Microsoft Outlook for Windows software, a Desktop Information Management (DIM) application. Topics include Core Level MOUS Skills for Microsoft Outlook functions such as the tools needed to send and receive e-mail; organizing schedules and events; and maintaining contact lists, to-do lists, notes, and a journal. This course prepares the student for Microsoft Office User Specialist (MOUS) Outlook Core Certification. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

BCOT 108
WORDPERFECT FOR WINDOWS  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Ability to type 30 wpm and concurrent enrollment in BCOT 3T.
This course introduces the student to beginning word processing and emphasizes advanced word processing functions on IBM compatible personal computers using Microsoft Word for Windows software. Topics include Core Level MOUS Skills for Microsoft Word functions such as creating, printing, and editing word documents; formatting text and using help; enhancing the visual display and clarity of documents; working with multiple documents, formatting documents, creating and formatting tables; inserting graphic elements; and exploring the Internet. Topics also include Expert Level Mous Skills for Microsoft Word functions such as formatting with special features; merging documents and sorting and selecting data; working with shared documents; creating tables and indexes; recording, running, and editing macros; creating fill-in forms; and adding visual appeal to documents. This course prepares the student for Microsoft Office User Specialist (MOUS) Word Core Certification and Word Expert Certification. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment. (This course is not open to students with credit in BCOT 90 and BCOT 91). Transfer Credit: CSU

BCOT 110
DESKTOP PUBLISHING—WORDPERFECT FOR WINDOWS  1.5 UNITS
Class hours: 1.5 lecture/1 lab
Prerequisite: BCOT 108 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student to desktop publishing—WordPerfect for Windows using Microsoft WordPerfect for Windows software. Topics include Core Level MOUS Skills for Microsoft WordPerfect functions such as preparing and formatting an Excel worksheet, maintaining and enhancing a worksheet, moving data within and between workbooks, inserting formulas in a worksheet, creating a chart in Excel, inserting clip art images, and creating maps. Topics also include Expert Level MOUS Skills for Microsoft Excel functions such as formatting Excel worksheets using advanced formatting techniques, working with templates and workbooks using advanced functions; working with lists; using Excel’s analysis tools; managing and auditing worksheets; working with templates and workbooks; collaborating with workgroups; importing and exporting data. This course prepares the student for Microsoft Office User Specialist (MOUS) Excel Expert Certification. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

BCOT 112
MICROSOFT WORD
FOR WINDOWS  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student to beginning spreadsheet functions and emphasizes advanced spreadsheet functions on IBM compatible personal computer using Microsoft Excel for Windows software. Topics include Core Level MOUS Skills for Microsoft Excel functions such as preparing and formatting an Excel worksheet, maintaining and enhancing a worksheet, moving data within and between workbooks, inserting formulas in a worksheet, creating a chart in Excel, inserting clip art images, and creating maps. Topics also include Expert Level MOUS Skills for Microsoft Excel functions such as formatting Excel worksheets using advanced formatting techniques, working with templates and workbooks using advanced functions, working with lists, using Excel’s analysis tools, managing
and auditing worksheets, collaborating with workgroups, and importing and exporting data. This course prepares the student for Microsoft Office User Specialist (MOUS) Excel Core Certification and Microsoft Office User Specialist Expert Certification. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment. This course is not open to students with credit in BCOT 92 and BCOT 93.

Transfer Credit: CSU

BCOT 114
INTRODUCTION TO MICROSOFT OFFICE 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Ability to type 30 wpm and concurrent enrollment in BCOT 3T.

This course is designed to teach students business applications software and office skills using Windows-compatible computers and Microsoft Office (Word, Excel, Access, and PowerPoint) to integrate the multifaceted tasks within the office environment. Concepts and skills include creating, editing, and printing letters, memos, reports, presentations, graphics, overheads, business figure analysis, miscellaneous office documents, and maintenance/modification of databases. This course can be taken in either a traditional or an on-line learning environment.

Transfer Credit: CSU

BCOT 115
ADVANCED MICROSOFT OFFICE 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BCOT 114 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.

This course extends the students’ basic knowledge of Microsoft Office (Microsoft Word, Microsoft Excel, Microsoft Access, and Microsoft PowerPoint). Students will learn the proper procedures to create advanced documents by designing, integrating, and merging letters, reports, workbooks, databases, and presentations suitable for professional purposes. It will help students demonstrate their proficiency in the Microsoft Office applications by preparing them to pass the core level Microsoft Office User Specialist (MOUS) exams. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

Transfer Credit: CSU

BCOT 116
DESKTOP PUBLISHING--WORD FOR WINDOWS 1.5 UNITS
Class hours: 1.5 lecture/1 lab
Prerequisite: BCOT 112 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: BCOT 51 or equivalent with a grade of Credit or “C” or higher.

This course is for students already familiar with word processing. Applications of key concepts develop skills in critical thinking, decision making and creativity in planning, designing, and evaluating documents. These documents include letterheads, business cards, personal documents, flyers, brochures, promotional documents, charts, transparencies, presentation materials, newsletters, reports, manuals, and booklets. The visual appeal of business and personal documents is enhanced with variable page layouts using standardized type and graphic design techniques along with Word templates. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online environment. (This course is intended for the business office professional and not the graphic artist.)

Transfer Credit: CSU

BCOT 117
DESKTOP PUBLISHING--MICROSOFT PUBLISHER 1.5 UNITS
Class hours: 1.5 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.

This course provides an introduction to the functions of Microsoft Publisher software. Microsoft Publisher will be used to create camera-ready printed presentation materials. The course will cover the fundamentals required to develop presentation materials such as business forms, letterhead, business logos, advertisements, organization charts, mail-order catalogs, three-fold brochures, and newsletters. This course is intended for the business professional not the graphic artist. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment.

Transfer Credit: CSU

BCOT 120
WORD PROCESSING OFFICE SIMULATION 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BCOT 108 or BCOT 112 or equivalent with a grade of Credit or “C” or higher.
Recommendation: Concurrent enrollment in BCOT 3T.

This course reinforces previously learned word processing keyboarding and language-arts skills. It introduces students to typical word processing procedures and activities in a realistic setting. It provides meaningful application materials for students who can operate word processing equipment.

Transfer Credit: CSU

BCOT 131
BEGINNING COLLEGE KEYBOARDING & DOCUMENT PROCESSING 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.

This is a basic course in typing designed to teach control of the keyboard by touch. The student will learn basic computer parts and terminology. This course can be taken in either a traditional or an on-line learning environment.

Transfer Credit: CSU

BCOT 132
COLLEGE KEYBOARDING & DOCUMENT PROCESSING REVIEW 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
Recommendation: Computer keyboard skills and ability to type 25 wpm. Concurrent enrollment in BCOT 3T.

This course provides a review for those students who have had previous keyboarding and document processing experience. Touch control of the keyboard and proper typing techniques; keyboarding speed and accuracy; and the application of basic word processing computer skills in the formatting of reports, letters, memos, tables, e-mail correspondence, and other types of either a traditional or an online learning environment. (Formerly BCOT 61)

Transfer Credit: CSU

BCOT 133
ADVANCED COLLEGE KEYBOARDING & DOCUMENT PROCESSING 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: BCOT 131 or BCOT 132 or equivalent with a grade of Credit or “C” or higher.
Recommendation: Concurrent enrollment in BCOT 3T.

In this course the student develops speed and control in typing as well as attains a working knowledge of business papers, facility in tabulation, and skill in production typing. This course can be taken in either a traditional or an on-line learning environment.

Transfer Credit: CSU
Announcement of Courses

BCOT 155
ADMINISTRATIVE SECRETARIAL PROCEDURES 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Recommendation: BCOT 131 or equivalent with a grade of Credit or “C” or higher.
Concurrent enrollment in BCOT 3T.
This course will emphasize the planning, organizing, problem solving, and human relation skills needed by secretaries at the administrative level. Employed or re-entry office support personnel may use this class for a refresher course or for professional purposes. This course can be taken in a traditional classroom setting or online environment.
Transfer Credit: CSU

BCOT 161
PRINCIPLES OF FILING 1 UNIT
Class hours: 1 lecture/1.5 lab
Prerequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This is a computerized filing course that covers the principles of information processing, storage, and retrieval. Instruction is given in the rules of indexing and alphabetizing. A study will be made of geographic, numeric, subject, microfilming, and magnetic tape storage systems. Practice will be given in the processing of materials, filing, indexing, alphabetizing, coding, creating filenames and filename extensions for electronic files, and storing and retrieving electronic data to and from directories and subdirectories.
Transfer Credit: CSU

BCOT 162
BUSINESS SPELLING AND PROOFREADING SKILLS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Concurrent enrollment in BCOT 3T.
This course is designed to teach and reinforce accurate spelling, vocabulary, word usage, and proofreading skills with a distinct business orientation. It emphasizes the business context of these basic communications skills, which are needed for integration into other courses such as typewriting, machine transcription, shorthand, office procedures, and court reporting. This course meets 54 hours of the English requirement for Court Reporting Certification.
Transfer Credit: CSU

BCOT 163
MACHINE TRANSCRIPTION 4.5 UNITS
Class hours: 4 lecture/2 lab
Prerequisite: BCOT 131 or BCOT 132, BCOT 162, and BCOM 46, or equivalent courses with grades of Credit or “C” or higher.
Recommendation: Concurrent enrollment in BCOT 3T.
This is a course designed to teach the skills and knowledge necessary for the production of high-quality business documents through the total transcription concept (from handwritten copy, from machine dictation, or from shorthand dictation) and for the development of proper machine dictation skills/procedures. The emphasis is on the development of language arts skills, skillful keyboarding, and accurate proofreading in producing quality finished documents on electronic equipment/microcomputers.
Transfer Credit: CSU

BCOT 173/174
BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Corequisite: Enrollment in 7 or more units, including Business Computerized Office Technologies Occupational Work Experience, in a declared business major. Three units of Business Computerized Office Technologies Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Computerized Office Technologies Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.
First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.
Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 4 times.
Transfer Credit: CSU

BUSINESS COURT REPORTING/COMPUTERIZED SHORTHAND

BCOT 175
BEGINNING AURAL LANGUAGE SKILLS FOR COURT REPORTERS 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Recommendation: BUSC 140, BUSC 141, and BCOM 46 or equivalent with grades of Credit or “C” or higher.
This course emphasizes the grammar, punctuation, and capitalization of spoken language including vocabulary building with an emphasis on spelling, homophone differentiation, and stenotype machine outlines requisite for realtime computer transcription.

BUSC 50
COMPUTER-AIDED PROOFREADING 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 57A, BUSC 142, and BUSC 192 or equivalent with grades of Credit or “C” or higher.
This course is designed to help students acquire the skills necessary to proofread accurately and correct computer transcripts of legal proceedings. Proofreading is an essential step in the production of all computer-aided transcripts, including court records and deposition transcripts. This course may be taken a maximum of 2 times.

BUSC 57A
ADVANCED AURAL LANGUAGE SKILLS FOR COURT REPORTERS 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 46, BUSC 57A, BUSC 140, and BUSC 141 or equivalent with grades of Credit or “C” or higher.
This course is a continuation of the study of the grammar, punctuation, and capitalization of spoken language with emphasis on further developing the students’ ability to analyze and correctly apply rules of punctuation, word usage, and spelling to increasingly complex sentence structures. Additional emphasis will be placed on the creation of stenotype machine outlines requisite for realtime computer translation.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Class Hours</th>
<th>Prerequisite/Recommendations</th>
<th>Transfer Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSC 113</td>
<td>Legal Terminology</td>
<td>3</td>
<td>3 lecture/1 lab</td>
<td>None.                                                                 ostream: BUSC 140 or equivalent with a grade of Credit or “C” or higher. This course is designed to familiarize the students with legal terminology, which will prepare the students to become proficient in recognizing, using, and spelling legal terminology. This course will help the students master unfamiliar keying patterns and enhance the development of computerized shorthand skills. Transfer Credit: CSU.</td>
<td></td>
</tr>
<tr>
<td>BUSC 114</td>
<td>Medical Terminology for Machine Shorthand</td>
<td>3</td>
<td>3 lecture/2 lab</td>
<td>None. Recommendation: BUSC 142 or equivalent with a grade of Credit or “C” or higher. This course of study involves medical dictation at varying degrees of speed. Dictation will include words peculiar to the human anatomy, including the skeletal structure, and medical prefixes and suffixes. Definitions of these words, pronunciation, and accuracy of transcript will be stressed. Dictation will be given for examinations, diagnoses, laboratory investigations, patient case histories, operation reports, medical records, and autopsy reports. Transfer Credit: CSU.</td>
<td></td>
</tr>
<tr>
<td>BUSC 115</td>
<td>Medical Shorthand for Court Reporters</td>
<td>4</td>
<td>4 lecture/2 lab</td>
<td>None. Recommendation: BUSC 114, BUSC 143 or equivalent with grades of Credit or “C” or higher. This course is designed to reinforce medical terminology and to build shorthand speed from dictation on familiar medical transcripts and other related material including medications, nuclear medicine, laboratory and X-ray procedures. Transfer Credit: CSU.</td>
<td></td>
</tr>
<tr>
<td>BUSC 116</td>
<td>Introduction to Courtroom Procedures</td>
<td>4</td>
<td>4 lecture/2 lab</td>
<td>None. Recommendation: BUSC 119C, BUSC 114 and BUSC 192 or equivalent with grades of Credit or “C” or higher. This course is designed to give an overall view of the judicial system. In addition, the course content traces lawsuits and civil and criminal procedures from their inception through the trial and appeal. This course places emphasis on the court reporter’s role at each phase of the trial. Transfer Credit: CSU.</td>
<td></td>
</tr>
<tr>
<td>BUSC 117</td>
<td>Deposition Procedures, Codes and Ethics</td>
<td>4</td>
<td>4 lecture/2 lab</td>
<td>None. Recommendation: BUSC 144 or equivalent with a grade of Credit or “C” or higher. This course provides a thorough understanding of deposition procedures, ethics, reference techniques, management skills, and introduces the California Codes pertinent to depositions. This course provides an opportunity to develop management techniques and an understanding of professional practices. Transfer Credit: CSU.</td>
<td></td>
</tr>
<tr>
<td>BUSC 118</td>
<td>Beginning Computer-Aided Transcription</td>
<td>3</td>
<td>2 lecture/3.5 lab</td>
<td>None. Corequisite: BUSC 1T. Recommendation: BUSC 1141, BUSC 142 or equivalent with grades of Credit or “C” or higher. This course introduces students to the Computer-Aided Transcription (CAT) process. It includes some history of CAT and some computer terminology. Students receive instruction in basic English text entry and nontechnical dictionary building. Students will be required to have an electronic stenotype machine or purchase a Prowriter attachment for their stenotype machine to create personal dictionaries of approximately 20,000 words. This course may be taken a maximum of 2 times. Transfer Credit: CSU.</td>
<td></td>
</tr>
<tr>
<td>BUSC 119A</td>
<td>Advanced Computer-Aided Transcription</td>
<td>3</td>
<td>2 lecture/3.5 lab</td>
<td>None. Corequisite: BUSC 119C or equivalent with a grade of Credit or “C” or higher. This course introduces students to the principles of realtime writing for computer-aided transcription (CAT). It provides a complete plan for analyzing personal writing style, and implementing a step-by-step plan to reinforce realtime writing using a current court reporting CAT software system. This course may be taken a maximum of 3 times. Transfer Credit: CSU.</td>
<td></td>
</tr>
<tr>
<td>BUSC 119B</td>
<td>Intermediate Computer-Aided Transcription</td>
<td>3</td>
<td>2 lecture/3.5 lab</td>
<td>None. Corequisite: None. Recommendation: BUSC 119A and BUSC 143 or equivalent with a grade of Credit or “C” or higher. This CAT course includes looking, editing, transcribing, spell checking, formatting, and printing a document. Students use the Prowriter attachment or electronic stenotype machine to continue preparing their personal dictionaries on a disk. This course may be taken a maximum of 3 times. Transfer Credit: CSU.</td>
<td></td>
</tr>
</tbody>
</table>
Announcement of Courses

BUSC 119F
COMPUTER-AIDED LEGAL DICTIONARY BUILD 3 UNITS
Class hours: 2 lecture/3.5 lab
Prerequisite: None.
Corequisite: BUSC 1T.
Recommendation: BUSC 119B or equivalent with a grade of Credit or “C” or higher.
This course is for students proficient in computerized machine shorthand writing skills and who are interested in a career path in legal transcribing or court reporting. It provides a systematic approach toward building a basic legal computer-aided transcription (CAT) dictionary. Entries into the CAT dictionary include Latin and Greek prefixes, suffixes, roots, and combining forms of legal terminology used in various aspects of the legal system. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

BUSC 125
COMPUTERIZED SHORTHAND REALTIME PRACTICUM I (100-130 WPM) 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119C, BUSC 119D and BUSC 143 or equivalent with grades of Credit or “C” or higher.
This course continues intensive sustained dictation to improve realtime writing and computer transcription ability. Latin and French words, Congressional Record, multiple-voice testimony, legal opinions, and expert opinion materials in realtime are included. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

BUSC 126
COMPUTERIZED SHORTHAND REALTIME PRACTICUM II (120-150 WPM) 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119C, BUSC 119D and BUSC 144 or equivalent with grades of Credit or “C” or higher.
This course continues intensive sustained dictation to improve realtime writing and computer transcription ability. Latin and French words, Congressional Record, multiple-voice testimony, Final Argument, Opening Statement and Conference at the Bench broaden keying vocabulary. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

BUSC 127
COMPUTERIZED SHORTHAND REALTIME PRACTICUM III (140-170 WPM) 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119C, BUSC 119D and BUSC 145 or equivalent with grades of Credit or “C” or higher.
This course develops realtime stenotype techniques and speed through the use of sustained dictation consisting of Congressional Record, literary, jury charge, and multiple-voice testimony. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

BUSC 128
COMPUTERIZED SHORTHAND REALTIME PRACTICUM IV (160-190 WPM) 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119C, BUSC 119D and BUSC 146 or equivalent with grades of Credit or “C” or higher.
This course offers intensive sustained dictation to increase realtime accuracy, endurance, and speed. The student is prepared for the National Court Reporters Certified Realtime Reporter Examination (CRR). This course may be taken a maximum of 4 times.
Transfer Credit: CSU

BUSC 129
COMPUTERIZED SHORTHAND REALTIME PRACTICUM V (180-210 WPM) 5 UNITS
Class hours: 2 lecture/10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119C, BUSC 119D and BUSC 147 or equivalent with grades of Credit or “C” or higher.
This course offers intensive sustained dictation to increase realtime capability and to prepare advanced students for the Certified Realtime Reporter (CRR) examination and various positions. Simulated courtroom proceedings will be used as a means to qualify for the State Boards. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

BUSC 130
COMPUTERIZED SHORTHAND REALTIME PRACTICUM VI (190-225 WPM) 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119C, BUSC 119D and BUSC 148 or equivalent with grades of Credit or “C” or higher.
This course offers the student intensive, sustained dictation to increase realtime accuracy, endurance, and speed. The student is prepared for the National Court Reporters Certified Realtime Reporter Examination (CRR). This course may be taken a maximum of 4 times.
Transfer Credit: CSU

BUSC 139
EXPLORING CAREER OPPORTUNITIES IN COURT REPORTING 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides the new and continuing student an overview of the various career paths and emerging opportunities available to students who are interested in studying court reporting. Students are guided through an overview of current career paths available and through the process of developing a personalized education plan in court reporting. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

BUSC 140
COMPUTERIZED SHORTHAND THEORY 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: None.
Corequisite: BUSC 141.
Recommendation: BCOM 46 or equivalent with a grade of Credit or “C” or higher. Minimum typing speed of 35 wpm or enrollment in a typing class.
This first semester course covers the basic theory of computer compatible shorthand and mastery of the stenotype keyboard.
Transfer Credit: CSU

BUSC 140A
COMPUTERIZED SHORTHAND THEORY A 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
Corequisite: BUSC 141A.
Recommendation: Minimum typing speed of
35 wpm or enrollment in a typing class. This first-semester course covers the basic theory of computer compatible shorthand and mastery of the stenotype keyboard. This course is not open to students with credit in BUSC 140 or prior credit in BUSC 140A and BUSC 140B.

**Transfer Credit: CSU**

**BUSC 140B**  
**COMPUTERIZED SHORTHAND THEORY B**  
**1.5 UNITS**

Class hours: 1 lecture/2 lab
Prerequisite: None.
Corequisite: BUSC 141B.
Recommendation: Minimum typing speed of 35 wpm or enrollment in a typing class. This second-semester course covers the basic theory of computer compatible shorthand and mastery of the stenotype keyboard. This course is not open to students with credit in BUSC 140 or prior credit in BUSC 140A and BUSC 140B.

**Transfer Credit: CSU**

**BUSC 141**  
**COMPUTERIZED SHORTHAND THEORY REVIEW/SKILL DEVELOPMENT**  
**4 UNITS**

Class hours: 2 lecture/6 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Minimum typing speed of 35 wpm or enrollment in a typing class. This course is an intensive review of the basic theory of computer compatible shorthand and is designed to complement the corresponding theory class through review of the lessons as they are completed. This course may be taken a maximum of 3 times. Students with prior credit in BUSC 141 may enroll in this course for a maximum of 1.5 units.

**Transfer Credit: CSU**

**BUSC 141A**  
**COMPUTERIZED SHORTHAND THEORY REVIEW/SKILL DEVELOPMENT A**  
**1.5 UNITS**

Class hours: 1 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: May be taken concurrently with BUSA 140A. Minimum typing speed of 35 wpm or enrollment in a typing class. This course is an intensive review of the first semester of the basic theory of computer compatible shorthand and is designed to complement the corresponding theory class through review of the lessons as they are completed. This course may be taken a maximum of 3 times. Student with prior credit in BUSC 141 may enroll in this course for a maximum of 1.5 units.

**Transfer Credit: CSU**

**BUSC 142**  
**INTERMEDIATE COMPUTERIZED SHORTHAND**  
**4.5 UNITS**

Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119A, BUSC 140 or equivalent with grades of Credit or “C” or higher. May be taken concurrently with BUSC 141 and BUSC 143. Minimum typing speed of 40 wpm or enrollment in a typing class. This course provides basis for developing, refining, and improving machine skill and speed. Emphasis is placed on frequently used words and phrases, word families, number drills, legal terms, literary and business dictation, and two-voice question and answer testimony. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**BUSC 143**  
**COMPUTERIZED SHORTHAND SPEED BUILDING I**  
**4.5 UNITS**

Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119B or equivalent with a grade of Credit or “C” or higher. May be taken concurrently with BUSC 142 and BUSC 144. Minimum typing speed of 43 wpm or enrollment in a typing class. This course provides a continuing basis to further develop, refine, and improve machine shorthand skill and speed. In addition to the areas emphasized in previous classes, jury charge and multiple-voice colloquy are included. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**BUSC 144**  
**COMPUTERIZED SHORTHAND SPEED BUILDING II**  
**4.5 UNITS**

Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119C with a grade of Credit or “C” or higher. May be taken concurrently with BUSC 143 and BUSC 145. Minimum typing speed of 47 wpm or enrollment in a typing class. This course continues intensive sustained dictation to increase machine shorthand speed and to improve transcription ability. Latin and French words, Congressional Record, multiple-voice testimony, legal opinions, and expert opinion materials are included. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**BUSC 145**  
**COMPUTERIZED SHORTHAND SPEED BUILDING III**  
**4.5 UNITS**

Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 119D with a grade of Credit or “C” or higher. May be taken concurrently with BUSC 144 and BUSC 146. Minimum typing speed of 50 wpm or enrollment in a typing class. This course continues intensive sustained dictation to increase machine shorthand speed and to improve transcription ability. Latin and French words, Congressional Record, multiple-voice testimony, Final Argument, Opening Statement, and Conference at the Bench broaden keying vocabulary. This course may be taken a maximum of 3 times.

**Transfer Credit: CSU**

**BUSC 146**  
**COMPUTERIZED SHORTHAND SPEED BUILDING (140-170 WPM)**  
**4.5 UNITS**

Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 145 or equivalent with a grade of Credit or “C” or higher. May be taken concurrently with BUSC 147. Minimum typing speed of 55 wpm or enrollment in a typing class. This course is designed to develop stenotype techniques and speed through the use of sustained dictation consisting of Congressional Record, literary, jury charge, and multiple-voice testimony. This course may be taken a
maximum of 3 times.
Transfer Credit: CSU

BUSC 147
COMPUTERIZED SHORTHAND
SPEED BUILDING
(160-190 WPM) 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 185 with a grade of Credit or “C” or higher. May be taken concurrently with BUSC 146 and BUSC 148. Minimum typing speed of 60 wpm or enrollment in a typing class.
This course is designed to develop stenotype techniques and speed through the use of sustained dictation consisting of Congressional Record, literary, jury charge, and multiple-voice testimony. In addition, this course is designed to prepare advanced students for various state and city hearings reporter examinations and employment. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

BUSC 148
COMPUTERIZED SHORTHAND
SPEED BUILDING
(180-210 WPM) 4.5 UNITS
Class hours: 2 lecture/10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 185 with a grade of Credit or “C” or higher. May be taken concurrently with BUSC 147 and BUSC 149. Minimum typing speed of 60 wpm or enrollment in a typing class.
This course offers intensive sustained dictation to increase machine shorthand speeds and to prepare advanced students for the CSR examination and various positions. Simulated courtroom proceedings will be used as a means to qualify for the State Boards. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

BUSC 149
COMPUTERIZED SHORTHAND
SPEED BUILDING
(190-225 WPM) 5 UNITS
Class hours: 2 lecture/10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 185 or equivalent with a grade of Credit or “C” or higher. May be taken concurrently with BUSC 148. Minimum typing speed of 60 wpm and completion of 60 hours of apprenticeship training.
This course is designed to offer intensive sustained dictation to increase endurance and speed. In addition, this course offers a comprehensive academic review in preparation for the Certified Shorthand Reporters and the National Court Reporters examinations. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

BUSC 152
INTRODUCTION TO JURY CHARGE
INTERMEDIATE COMPUTERIZED
SHORTHAND 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSC 140 and BUSC 141 or equivalent with grades of Credit or “C” or higher. Minimum typing speed of 40 wpm. This short-term, intensive course is designed to introduce methodology of reporting and transcribing jury charge material and to develop punctuation skills, formatting techniques, and stenotype speed for this aspect of reporting. Sustained dictation consists of jury charge and two-voice testimony. This course develops proficiency in recording jury charge material at speeds ranging from 60-90 wpm. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

BUSC 153
MULTIPLE-VOICE COLLOQUY I
COMPUTERIZED SHORTHAND
SPEED BUILDING I 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Minimum stenotype speed of 70 wpm and a minimum typing speed of 43 wpm.
This short-term, intensive course promotes the development of speed, accuracy, and formatting techniques in reporting and transcribing multiple-voice colloquy. This course develops proficiency in recording colloquy at speeds ranging from 80-110 wpm. Sustained dictation consists of multiple-voice colloquy, jury charge, and two-voice testimony. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

BUSC 154
INTRODUCTION TO
CONGRESSIONAL RECORD
COMPUTERIZED SHORTHAND
SPEED BUILDING II 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Minimum stenotype speed of 90 wpm and minimum typing speed of 47 wpm.
This short-term, intensive course introduces methodology of reporting and transcribing Congressional Record material and develops punctuation skills, formatting techniques, and stenotype speed for this aspect of reporting. Sustained dictation consists of Congressional Record, jury charge, and two-voice testimony. This course develops proficiency in recording Congressional Record material at speeds ranging from 100-130 wpm. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

BUSC 155
MULTIPLE-VOICE COLLOQUY II
COMPUTERIZED SHORTHAND
SPEED BUILDING III 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Minimum stenotype speed of 110 wpm and minimum typing speed of 50 wpm.
This short-term, intensive course further promotes the development of speed, accuracy, and formatting techniques in reporting and transcribing increasingly complex multiple-voice colloquy. This course develops proficiency in recording colloquy at speeds ranging from 120-150 wpm. Sustained dictation consists of multiple-voice colloquy, jury charge, Congressional Record, and two-voice testimony. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

BUSC 156
JURY VOIR DIRE PROCEDURES
COMPUTERIZED SHORTHAND
SPEED DEVELOPMENT
(140-170 WPM) 4.5 UNITS
Class hours: 2 lecture/8 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Minimum stenotype speed of 130 wpm and minimum typing speed of 55 wpm.
This short-term, intensive course is designed to introduce methodology of reporting jury voir dire and to develop management techniques and stenotype speed for this aspect of reporting. The course develops proficiency in recording jury voir dire proceedings and jury charge at speeds ranging from 150-160 wpm. This course may be taken a maximum of 3 times.
Transfer Credit: CSU
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Corequisite</th>
<th>Class Hours</th>
<th>Transfer Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSC 157</td>
<td>CONGRESSIONAL TESTIMONY COMPUTERIZED SHORTHAND SPEED DEVELOPMENT</td>
<td>4.5</td>
<td></td>
<td>None.</td>
<td>2 lecture/8 lab</td>
<td>CSU</td>
</tr>
<tr>
<td></td>
<td>(160-190 WPM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSC 158</td>
<td>PROFESSIONAL PRACTICES HEARINGS/CONFERENCES COMPUTERIZED SHORTHAND SPEED</td>
<td>5</td>
<td></td>
<td>None.</td>
<td>2 lecture/10 lab</td>
<td>CSU</td>
</tr>
<tr>
<td></td>
<td>DEVELOPMENT (180-210 WPM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSC 159</td>
<td>IN CURIA/IN CAMERA PROCEDURES COMPUTERIZED SHORTHAND SPEED DEVELOPMENT</td>
<td>5</td>
<td></td>
<td>None.</td>
<td>2 lecture/10 lab</td>
<td>CSU</td>
</tr>
<tr>
<td></td>
<td>(190-225 WPM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSC 173</td>
<td>BUSINESS COURT REPORTING/COMPUTERIZED SHORTHAND OCCUPATIONAL WORK EXPERIENCE</td>
<td>3-4</td>
<td></td>
<td>None.</td>
<td>1 lecture</td>
<td>CSU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSC 181</td>
<td>COMPUTERIZED SHORTHAND SPEED BUILDING (240 WPM)</td>
<td>4.5</td>
<td></td>
<td>None.</td>
<td>2 lecture/8 lab</td>
<td>CSU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSC 185</td>
<td>CSR/RPR EXAMINATION PREPARATION</td>
<td>1.5</td>
<td></td>
<td>None.</td>
<td>1.5 lecture</td>
<td>CSU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSC 190</td>
<td>MEDICAL TRANSCRIPTION I/COURT REPORTING METHOD</td>
<td>3</td>
<td></td>
<td>None.</td>
<td>3 lecture/2 lab</td>
<td>CSU</td>
</tr>
</tbody>
</table>

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
hands-on captioning assignments designed to familiarize students with captioning software and application. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

BUSINESS PARALEGAL

(Business Division)

BL 1T (Not degree applicable)

LEGAL-COMPUTER TUTORIAL 0.5 UNIT

Class hours: 1 hour per week as arranged
Prerequisite: None.
Corequisite: Concurrent enrollment in one or more advanced Business Paralegal (BL) course.
Recommendation: BL 56 with a grade of Credit or “C” or higher.
This course is designed to assist development in computer applications in the advanced Business Paralegal courses. Students must attend one hour minimum per week and are limited to a maximum of three hours per week.

BL 52

LAW OFFICE MANAGEMENT 3 UNITS

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: BL 56 with a grade of Credit or “C” or higher.
This course is a study of law office management and organization. Roles, activities, and responsibilities in timekeeping and accounting systems for law offices, as well as legal calendaring, file organization, and retrieval systems, will be taught. Law office computers and their functions in the law office will be utilized.

BL 56

INTRODUCTION TO COMPUTERIZED LEGAL SOFTWARE 3 UNITS

Class hours: 3 lecture +1 hr. lab. arr.
Prerequisite: None.
This is an introductory course in the utilization of legal software. The student will use software in conjunction with a document control system that will include applications for the following law office functions: document maintenance, document retrieval, document construction, document billing, and document calendaring.

BL 57

LEGAL DOCUMENT PRODUCTION 3 UNITS

Class hours: 3 lecture +1 hr. lab. arr.
Prerequisite: None.
This course is an introduction to careers in the legal field including the role of the paralegal/legal assistant in the law office and the rules of ethics which govern lawyers and legal assistants. The course also covers substantive
law in the areas of crimes and torts and describes the structure of the legal system in the federal and state settings. An introduction to the law library and legal resources is provided.

Transfer Credit: CSU BL 102

ADVANCED CALIFORNIA CIVIL PROCEDURES 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: BL 100 with a grade of Credit or “C” or higher.
Recommendation: BL 56 with a grade of Credit or “C” or higher.
This course continues the study of California Civil Procedures through the trial of a civil matter. Students will study the elements of discovery and develop a written discovery plan. Students will draft motions, judicial arbitration materials, trial briefs, and settlement proceedings. This is an optional course concentrating in advanced civil litigation and writing.

Transfer Credit: CSU

BL 103 LEGAL RESEARCH 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: BL 101 and BL 56 or equivalent with grades of Credit or “C” or higher.
This course is designed to introduce students to the basic techniques of legal research. Emphasis will be placed upon techniques of modern legal research which include the use of the law library and the specific techniques of how to use the primary and secondary sources of the law, legal terms, research aids; and introduction to legal writing. Primary emphasis will be on the legal research in the state of California.

Transfer Credit: CSU

BL 104 ADVANCED LEGAL RESEARCH 3 UNITS
Class hours: 3 lecture
Prerequisite: BL 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: BL 56 or equivalent with a grade of Credit or “C” or higher.
This is an advanced legal research course for the paralegal student. This course will utilize legal research skills to develop sophisticated techniques in the use of legal research materials both at the state and federal levels. Computerized legal research (Westlaw) and traditional research methods will be utilized in preparing complex legal research projects. Analysis of the law through practical application of legal research will be developed.
Memorandums, points and authorities, and comprehensive briefs will be required.

Transfer Credit: CSU

BL 105 INTRODUCTION TO FEDERAL AND CALIFORNIA EMPLOYMENT, LABOR, AND WORKERS’ COMPENSATION LAW 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an introduction to Federal and California State employment, labor, and workers’ compensation laws that affect the relationship between employers and employees in the workplace. It provides an understanding for both employers and employees of their rights and obligations under these laws.

Transfer Credit: CSU

BL 106 BANKRUPTCY LAW 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
Recommendation: BL 56 with a grade of Credit or “C” or higher.
This course is an introduction to the Federal Bankruptcy law, with emphasis on Chapter 7 Bankruptcies, and discussions and introduction to Chapter 11 and 13 proceedings. The student will complete an entire Chapter 7 Bankruptcy petition and other documents and motions involving a bankruptcy case under the Bankruptcy Code. Included will be creditors’ claims and motions for relief of automatic stay.

Transfer Credit: CSU

BL 107 PROBATE PROCEDURES 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
Recommendation: BL 56 with a grade of Credit or “C” or higher.
This course acquaints the student with the legal aspects of the business world. It will cover bailments, personal property, real property, agency, partnerships, corporations, wills, trusts, secured interests, and international law. (Formerly BA 112)

Transfer Credit: CSU; UC*
*UC credit limits may apply. BL 110, BL 111, and BA 113 combined: maximum credit, one course.

BL 108 FAMILY LAW PROCEDURES 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
Recommendation: BL 56 with a grade of Credit or “C” or higher.

BL 110 BUSINESS LAW 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a course designed to acquaint the student with the legal aspects of everyday business transactions. It will include discussions of legal rights, contracts, Universal Commercial Code (UCC) sales, negotiable instruments, and the structure of our judicial system. This course meets 54 hours of the legal requirement for Court Reporting Certification. (Formerly BA 111)

Transfer Credit: CSU; UC*
*UC credit limits may apply. BL 110, BL 111, and BA 113 combined: maximum credit, one course.

BL 112 ESTATE PLANNING FOR THE PARALEGAL 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
Recommendation: BL 56 with a grade of Credit or "C" or higher.
This course is an introduction to estate administration. The student will learn the legal theories relating to wills, trusts, succession, taxation, and probate. Document preparation will be required in the areas of wills, trusts, and estate plans.
Transfer Credit: CSU

BL 113
FUNDAMENTALS OF ALTERNATE DISPUTE RESOLUTIONS 3 UNITS
Class hours: 3 lecture +1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: BL 56 with a grade of Credit or "C" or higher.
This course is the study of the techniques that resolve disputes to avoid or circumvent a trial in the California Court system. Students will draft the documents utilized in negotiations, mediation, neutral fact finding, contractual arbitration, judicial arbitration, and private judging.
Transfer Credit: CSU

BL 114
LAW ON THE INTERNET 1.5 UNITS
Class hours: 1.5 lecture/.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the students to the basic techniques of using the Internet for legal research and career information. Students learn how to access and use the Internet. Emphasis is placed on search techniques including refining search queries and performing legal and career searches utilizing several web search engines. Federal and multi-state research materials will be used.
Transfer Credit: CSU

BL 115
ELDER LAW 3 UNITS
Class hours: 3 lecture +1 lab. hr. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to the expanding legal area of elder law. Topics include ethical considerations, government benefits, health care decision making, Medicare and Medi-Cal benefits, home care versus residential care facilities, and protection from physical and/or fiduciary abuse. Upon completion of the course, students will be able to direct the elderly or their families to the appropriate government or private agency for assistance.
Transfer Credit: CSU

BL 116
CRIMINAL LAW 3 UNITS
Class hours: 3 lecture/1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is an introduction to criminal law. Concepts covered include the legal system, elements of a crime, crimes against persons and property, defenses, searches and seizures, pre-trial and trial process, sentencing, corporate and white-collar crimes.
Transfer Credit: CSU

BL 120
LEGAL ETHICS 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a study of the major areas of legal ethics and rules of professional responsibility as they affect paralegal/legal assistants. The course also focuses on legal ethics as they apply to attorneys. The course will cover the substantive rules regarding the regulation of lawyers/paralegals, the unauthorized practice of law, issues of confidentiality and conflicts of interest, as well as advertising and solicitation.
Transfer Credit: CSU

Announcement of Courses

BL 161
CONSUMER LAW 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an introduction to the workings of the law to help the consumer better understand legal fundamentals and procedures. This course covers the legal profession and careers; the court system in the United States, contracts, property rights, negligence, wills, business organizations, marriage and divorce, real estate, bankruptcy, and consumer protection. (Formerly BA 161)
Transfer Credit: CSU

BL 172
BUSINESS PARALEGAL OCCUPATIONAL WORK EXPERIENCE 2 UNITS
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Paralegal Occupational Work Experience, in a declared business major.
Two units of Business Paralegal Occupational Work Experience require 120 non-paid hours of work or 150 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

BL 171
BUSINESS PARALEGAL OCCUPATIONAL WORK EXPERIENCE 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Business Paralegal Occupational Work Experience, in a declared business major.
One units of Business Paralegal Occupational Work Experience requires 60 non-paid hours or 75 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

BL 173/174
BUSINESS PARALEGAL OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: 1 hour/week coordination class.
Corequisite: Enrollment in 7 or more units, including Business Paralegal Occupational
Work Experience, in a declared business major. Three units of Business Paralegal Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Paralegal Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.

Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.

First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.

Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 4 times.

Transfer Credit: CSU

**BL 220**

**LANDLORD AND TENANT LAW** 3 UNITS

Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: BL 56 with a grade of Credit or “C” or higher.

This is an introduction to landlord and tenant law including the nature of the tenancy relationship, rental agreements, rights and obligations during tenancy, premises liability and unlawful detainer litigation. Rules governing preparation of the unlawful detainer summons and complaint and answer are covered as well as obtaining default judgment and possession of property.

Transfer Credit: CSU

**BL 230**

**CORPORATE LAW** 3 UNITS

Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: BL 56 with a grade of Credit or “C” or higher.

This is an introduction to corporate law. Concepts covered include substantive law considerations in choosing a business entity, pre-incorporation planning, forming a corporation, advantages and disadvantages of incorporating, issuance of shares and securities law considerations, corporate taxation, corporate structure, dividends and dissolution.

Transfer Credit: CSU

**BL 260**

**IMMIGRATION LAW** 3 UNITS

Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: BL 56.

This is an introduction to immigration law including history and administration of U.S. Immigration law, citizenships, nationality, immigrant and non-immigrant categories, admission rules to U.S., removal procedures and refugees and asylum. Rules governing preparation of the various immigration forms will also be discussed and reviewed.

Transfer Credit: CSU

**BUSINESS REAL ESTATE**

**(Business Division)**

**BUSR 1T** (Not degree applicable)

**BUSINESS REAL ESTATE COMPUTER TUTORIAL** 0.5 UNIT

Class hours: 1 lab
Prerequisite: None.
Corequisite: BUSR 50.
Recommendation: None.

This course develops proficiency in computer applications in Business Real Estate. Students must attend one hour minimum per week and are limited to a maximum of three hours per week.

**BUSR 50**

**INTRODUCTION TO REAL ESTATE SOFTWARE** 3 UNITS

Class hours: 3 lecture
Prerequisite: None.
Corequisite: BUSR 50 or equivalent with a grade of Credit or “C” or higher.

This course covers hands-on training using form filling of real estate contracts, rent versus buy, inputting properties into the Board of Realtors’ Multiple Listing Service, downloading available real estate offerings for presentation to buyers, amortization schedules, and cash flow projections of income producing properties (with emphasis on the manipulation of real property values with the changes of loan interest rates, overall capitalization rates, and gross rent multiplier).

**BUSR 51**

**REAL ESTATE PRE-LICENSE** 3 UNITS

Class hours: 3 lecture
Prerequisite: None.

Recommendation: BUSR 101 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.

This course covers materials used by the State of California Department of Real Estate in preparing test questions for Real Estate License examinations. The major topics studied are real estate law, real estate practice, real estate principles, real estate finance, real estate appraisal, real estate taxation, and real estate economics.

**BUSR 52**

**MORTGAGE LOAN BROKERING AND LENDING** 3 UNITS

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: BUSR 101 or equivalent with a grade of Credit or “C” or higher.

This course introduces the student to the principles and operations of the loan brokering field. The emphasis is on the lending rules for residential property disclosures, maximum fees and charges, agency relationships, advertising laws, HUD/RESPA calculations and the loan process. This course partially satisfies the requirements of the Real Estate Salesperson and California Real Estate Broker’s licenses.

**BUSR 53**

**ADVANCED REAL ESTATE APPRAISAL** 3 UNITS

Class hours: 3 lecture
Prerequisite: BUSR 131 or equivalent with a grade of Credit or “C” or higher.

This is an advanced course in real estate appraisal devoted to current techniques of estimating value. An income property will be chosen, visited, analyzed, and appraised. The creative development of a Narrative Appraisal Report will be taught, and its completion will be the goal of each student. All examples are or have been real life situations. Great emphasis is placed on preparing the student to be able to walk into an appraisal office and begin appraising. Capitalization, reciprocals, Inwood Methods, land and building residual techniques, and Hoskold Theories are covered.

**BUSR 54**

**COMPUTERS IN REAL PROPERTY APPRAISAL PRACTICE** 3 UNITS

Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: BUSR 53 or BUSR 131 or equivalent with a grade of Credit of “C” or higher.

This course covers hands-on computer training for students involved in the appraisal certificate courses or for real estate licensees interested in

---

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
the appraisal end of the real estate business. This course emphasizes appraisal techniques using form fill programs for Universal Residential Appraisal Report (URAR), Small Income Property Analysis and Report of Value, Large Income Property Analysis and Report of Value, Land Valuation Analysis and Report, Discounted Cash Flow Values (DCF’s), and the manipulation and practical application and use of the six functions of $1.

**BUSR 55**
**REAL ESTATE OFFICE ADMINISTRATION** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: BUSR 101 or equivalent with a grade of Credit or “C” or higher.
This course is designed to acquaint the real estate licensee with skills necessary to manage a profitable and stable business. These skills include techniques in research; office organization; managerial decision making; establishing controls systems and policies; recruiting, selecting, and training of personnel; product marketing and other skills related to financing, expansion, and growth. (This course may be taken as a broker’s license requirement.)

**BUSR 56**
**PRACTICES OF ESCROW** 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSR 151 or equivalent with a grade of Credit or “C” or higher.
This course is a study of the practices and procedures followed in processing escrows, with emphasis on real estate, familiarization and drawing of documents, title company practices and reports, taking an escrow, prorations and closing statements.

**BUSR 101**
**REAL ESTATE PRINCIPLES** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a beginning course in real estate, which introduces the student to real estate fundamentals and principles. Major topics covered are: history of real estate in California, contracts, agency, introduction to financing, deeds, liens and encumbrances, escrow and title insurance, land descriptions, and real estate math.
*Transfer Credit: CSU*

**BUSR 125**
**LEGAL ASPECTS OF REAL ESTATE** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to be of assistance to real estate brokers, salesmen, college students majoring in real estate, and others who may have a special interest in real estate financing. Actual case illustrations demonstrating lending policies, problems, and risks involved in financing transactions in residential apartment, commercial, and special purpose properties will be used. (Required by law for applicants for Broker's License.)
*Transfer Credit: CSU*

**BUSR 130**
**REAL ESTATE PRACTICES** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to acquaint the students with everyday real estate practice; to familiarize them with forms used and with on-the-job problems; to keep them abreast of change in conditions in the real estate business, notably the money market, land utilization, and zoning; and to inform them of modern selling practices and techniques. (Required by law for applicants for Broker’s License.)
*Transfer Credit: CSU*

**BUSR 131**
**INTRODUCTION TO REAL ESTATE APPRAISAL** 4 UNITS
Class hours: 4 lecture
Prerequisite: None.
This course is an introduction to the field of real property appraisal. It includes the hands-on evaluation of a single family residence and a multi-family income units. This course includes preparation of and finalization of the Uniform Residential Appraisal Report. Students will learn to use the Uniform Residential Appraisal Report (URAR) with addendums for the single family residence report and will use the Small Residential Income Report for multiple units. This class includes the mandatory 15 hours of Uniform Standards of Professional Appraisal Practice (USPAP). The completion of 15 hours of study of Uniform Standards of professional Appraisal Practices (USPAP) is required for every classification of State Appraisal Licensing or Certification. This course will qualify for 69 hours of basic Appraisal Education toward the 90 hours necessary for Trainee License, the 120 hours required for Licensed or Certified Residential classification, and the 180 hours required for the Certified General classification.
*Transfer Credit: CSU*

**BUSR 140**
**REAL ESTATE PROPERTY MANAGEMENT** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
The course illustrates how skilled management practice can assure the production of maximum financial yield to investment real estate. The students gain an overview of the many different types of properties in which they might become involved. The course considers the specific duties of management, including the establishment of rental schedule, merchandising available space, collecting rent, creating and supervising maintenance schedules and repairs, supervising all purchasing, developing a tenant relationship policy, and maintaining proper accounting records. In addition, the course includes Trust Fund Handling and Fair Housing, both required three-hour courses for real estate agent licenses. The course is additionally approved for 45 hours of continuing education for real estate licenses, 51 hours of continuing education for certified and licensed Appraisers or 54 hours of basic education for real estate appraisers. Course may be taken as a broker's license requirement.
*Transfer Credit: CSU*

**BUSR 151**
**FUNDAMENTALS OF ESCROW** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a basic course covering the principles and fundamentals of escrow procedure, with emphasis on the duties and responsibilities of escrow personnel. Attention is given to the value of an escrow as a means of facilitating the transfer of property and for protection of the interests of the principals. This is a background course for real estate students and a prerequisite for more advanced courses in escrow. Course may be taken as a broker's license requirement.
*Transfer Credit: CSU*
BUSR 157
REAL ESTATE INVESTMENTS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to acquaint the students with real estate investments. Content will include commonly used forms, solving on-the-job problems, cash flow analysis including calculation of cash-on-cash return, net present value and internal rate of return, analysis of the client's needs, and modern practices and techniques used in industry today.
Transfer Credit: CSU

BUSR 160
REAL ESTATE ECONOMICS 3 UNITS
Class hours: 3 lecture
Prerequisite: BUSR 101 or equivalent with a grade of Credit or "C" or higher.
Corequisite: BUSR 101 or equivalent.
Recommendation: BUSR 101 or equivalent.
This course covers principles and problems in urban development: basic methods of statistical analysis and interpretation, controlling land use, patterns of land use for commercial and industrial facilities, economic aspects of real estate investment theory, economic utilization and land resources, public housing, urban renewal and rehabilitation, and impact of environment controls. (Required for California Real Estate Broker's License.)
Transfer Credit: CSU

BUSR 172
BUSINESS REAL ESTATE OCCUPATIONAL WORK EXPERIENCE/CAREER INTERNSHIP 2 UNITS
Class hours: 1 hr/wk coordination class
Prerequisite: BUSR 101 or equivalent with a grade of Credit or "C" or higher.
Corequisite: Enrollment in 7 or more units, including Business Real Estate Occupational Work Experience/Career Internship, in a declared business major. Two units of Business Real Estate Occupational Work Experience/Career Internship require 120 non-paid hours of work or 150 paid hours of work per semester. Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to exacting experiences in the workplace. The aim of the course is to assist students in becoming more productive workers. In the process of doing so, it creates greater communication with increased understanding between the broker/sponsors, student/trainees and the college.
First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second-, third-, and fourth-semester students must meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

BUSR 173/174
BUSINESS REAL ESTATE OCCUPATIONAL WORK EXPERIENCE/CAREER INTERNSHIP 3-4 UNITS
Class hours: 1 lecture
Prerequisite: BUSR 101 or equivalent with a grade of Credit or "C" or higher.
Corequisite: Enrollment in 7 or more units, including Business Real Estate Occupational Work Experience, in a declared business major. Three units of Business Real Estate Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Business Real Estate Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to exacting experiences in the workplace. The aim of the course is to assist students in becoming more productive workers. In the process of doing so, it creates greater communication with increased understanding between the broker/sponsors, student/trainees and the college.
First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth semester students must meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 4 times.
Transfer Credit: CSU

CHEM 100
INTRODUCTORY CHEMISTRY 4 UNITS
Class hours: 3 lecture/2 lab/1 quiz
Prerequisite: MATH 40 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of Math Placement Process.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 100.
This course is an introduction to the basic principles of inorganic and organic chemistry and biochemistry with their application to problems encountered in our everyday lives. The course includes the metric system, atomic structure, bonding, solutions, chemical reactions, hydrocarbons, functional groups, carbohydrates, lipids, and proteins. It is designed to give a general introduction to fundamental concepts and to prepare students for majors in nursing, dental hygiene, physician assistant, physical therapy assistant, liberal arts, and technical fields. (Not open to those with credit in more advanced courses.)
Transfer Credit: CSU; UC*
*UC credit limits may apply: CHEM 110 and CHEM 100 combined: maximum credit, one course. No credit for CHEM 100 if taken after CHEM 111.

CHEM 105
CHEMISTRY FOR ELEMENTARY SCHOOL TEACHERS 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: MATH 105 or MATH 110A or concurrent enrollment or equivalent with a grade of Credit or "C" or higher, or satisfactory completion of the Math Placement Process.
This course is an introduction to the basic principles of chemistry with application to
problems encountered in everyday lives. The course includes the metric system, atomic structure, bonding, solutions, chemical reactions, simple and complex molecules, everyday organic and biochemical compounds. It is designed to give a general introduction to fundamental concepts and to prepare students for teaching at the elementary level.

CHEM 110
ELEMENTARY CHEMISTRY  4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit or “C” or higher, or satisfactory completion of the Math Placement Process.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 110.
This introductory inorganic chemistry course emphasizes basic principles, formulas, equations, and chemical math problems. It is designed for students with little or no previous chemistry and prepares students for CHEM 111, General Chemistry.

CHEM 111  (CAN CHEM SEQ A)(CAN CHEM 2)
GENERAL CHEMISTRY  5 UNITS
Class hours: 3 lecture/2 quiz/4 lab
Prerequisite: CHEM 110 or equivalent with a grade of Credit or “C” or higher and MATH 80 (or MATH 80B) or equivalent with grades of Credit or “C” or higher (satisfactory completion of the Math Placement Process may be substituted for MATH 80).
Recommendation: It is strongly recommended that all of the preceding prerequisites be completed within four years prior to the date of enrollment in CHEM 111.
This course is designed for science majors. It includes stoichiometry; properties and changes of state for gases, liquids and solids; solutions; colloids; equilibria of gases, weak acids and bases, and slightly soluble compounds.

CHEM 112  (CAN CHEM SEQ A)(CAN CHEM 4)
GENERAL CHEMISTRY  5 UNITS
Class hours: 3 lecture/2 quiz/4 lab
Prerequisite: CHEM 111 or equivalent with a grade of Credit or “C” or higher or equivalent.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 112.
This course is designed for science majors and is a continuation of CHEM 111. It includes oxidation-reduction; electrochemistry; modern atomic structure and bonding; molecular geometry; coordination chemistry; nuclear chemistry; thermodynamics; kinetics and organic chemistry. The laboratory includes some qualitative analysis.

CHEM 205  (CAN CHEM 12)
QUANTITATIVE ANALYSIS CHEMISTRY  4 UNITS
Class hours: 2 lecture/2 quiz/4 lab
Prerequisite: CHEM 112 or equivalent with a grade of Credit or “C” or higher.
Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 205.
This course is an introduction to theories and techniques of gravimetric, volumetric, colorimetric, and electro-analytic methods of analysis. The course is designed for majors in chemistry, engineering, medicine, dentistry, pharmacy, and laboratory technology.

CHEM 211-212
ORGANIC CHEMISTRY  5-5 UNITS
Class hours: 3-3 lecture/2-2 quiz/4-4 lab (211-F; 212-S)
Prerequisite: CHEM 112 or equivalent with a grade of Credit or “C” or higher.
Recommendation: It is strongly recommended that the preceding prerequisites be completed within four years prior to the date of enrollment in CHEM 211-212.
A year course in the properties and reactions of aliphatic and aromatic organic compounds with emphasis being placed on reaction mechanisms, fundamental principles and modern instrumental methods. The Laboratory will stress synthesis, techniques, and spectroscopic and qualitative analysis.

CHEM 250L
SPECIAL TOPICS IN CHEMISTRY  1 UNIT
Class hours: 3 lab
Prerequisite: CHEM 111 or equivalent with a grade of Credit or “C” or higher.
This course is primarily for chemistry or related science majors. Individual research problems are explored using materials, equipment and techniques not available to larger classes. This course may be taken a maximum of 2 times.
Transfer Credit: CSU, UC credit determined after admission

NON-CREDIT (ADULT EDUCATION) CLASS
AED 90.1 (Not degree applicable)
SUPERVISED SCIENCE TUTORIAL  0 UNIT
Class hours: 2 lab
Open entry/open exit
Corequisite: Enrollment in any chemistry course.
This course is designed to facilitate the learning of chemical knowledge, skills, and concepts through individualized and mediated instruction. It is open to any student enrolled in any chemistry course. (Formerly BIOL 9T, CHEM 9T)

CHILD DEVELOPMENT
(Health Occupations Division)

CD 110
CHILD DEVELOPMENT  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course explores the physical, cognitive/language, and socio-emotional development of the child from the prenatal through adolescent period across diverse cultures with an emphasis on the learning process and developmentally appropriate teaching practices. The student will also learn the effect of family, peers, and society upon children at different ages. This course meets the Department of Social Service Classification Indicator DS 1.
Transfer Credit: CSU; UC

CD 115
PARENT SCHOOL PARTNERSHIPS  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to introduce students to various current family, school, and community partnership models and approaches. Students will acquire knowledge and skills toward fostering two-way partnerships with families and communities of diverse backgrounds from primary through high school. Historical, legal, social, and political perspectives regarding educational access and equity for diverse student populations found in contemporary classrooms will be addressed. Teacher candidates will also broaden their knowledge and understanding of ethnically and linguistically diverse families and communities to be more effective in building relationships with them.
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

210
CD 124
THE CHILD IN A DIVERSE SOCIETY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers the principles of implementing a bias-free, anti-bias, and multicultural curriculum for young children. Race, ethnicity, class, gender, exceptionality, and age will be discussed along with the social and cultural conditions that influence a young child’s education. Emphasis will be placed on helping the child understand one’s own culture as well as the culture of others.
Transfer Credit: CSU

CD 139
OBSERVATION, ASSESSMENT, AND POSITIVE GUIDANCE OF CHILDHOOD BEHAVIOR 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: CDEC 111 and CD 110 or equivalent with grades of Credit or “C” or higher.
This course covers the theories of behavior, guidance techniques, and effective communication, observational, assessment, and documentation of young and school-age children. The emphasis will be on developing an understanding of children’s behavior and encouraging positive self-esteem while helping the child work toward self-control. Content will cover understanding observation as an integral part of appropriate instruction and intervention. This course is not open to students who have received credit for CD 137 and CD 138.
Transfer Credit: CSU

CHILD DEVELOPMENT/EARLY CHILDHOOD
(Health Occupations Division)

CDEC 62
EXPANDING CREATIVE ART EXPRESSION BY CHILDREN 3 UNITS
Class hours: 3 lecture
Prerequisite: CDEC 112 or equivalent with a grade of Credit or “C” or higher.
This course explores expressive visual arts experiences for children. The major focus will be on documenting and assessing the learning and thinking process of children and how it develops through exploration, discovery, and the creation of images, using a variety of art materials. This course meets the Department of Social Services Classification Indicator DS 3.

CDEC 63
EARLY CHILDHOOD EXPERIENCES IN LANGUAGE ARTS AND SOCIAL SCIENCES 3 UNITS
Class hours: 3 lecture
Prerequisite: CDEC 112 or equivalent with a grade of Credit or “C” or higher.
This course will acquaint the student with developmentally appropriate language, literature, social sciences, and dramatic activities for children. Instruction will cover pre-reading, pre-writing, and the development of listening and speaking skills. Special needs and diversity issues involved in the development of literacy skills are introduced. This course meets the Department of Social Services classification Indicator DS 3.

CDEC 65
MUSIC AND MOVEMENT FOR CHILDREN 3 UNITS
Class hours: 3 lecture
Prerequisite: CDEC 112 or equivalent with a grade of Credit or “C” or higher.
This course focuses on principles and methods of providing creative musical and movement experiences for children. The student will also have the opportunity to learn how to use simple musical instruments suitable for use in Early Childhood Education programs. This course meets the Department of Social Services Classification Indicator DS 3.

CDEC 66
ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD EDUCATION PROGRAMS 3 UNITS
Class hours: 3 lecture
Prerequisite: CD 110, CDEC 111, CDEC 112, and CDEC 113 or equivalent with grades of Credit or “C” or higher.
This course will acquaint the student with the role of the director/supervisor in a child care program. Content includes laws governing child care in California, admission procedures, recordkeeping, budget, finance, the physical plant, and staffing concerns. This course meets the Department of Social Services Classification Indicator DS 3.

CDEC 67
ADVANCED ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD EDUCATION PROGRAMS 3 UNITS
Class hours: 3 lecture
Prerequisite: CDEC 66 or equivalent with a grade of Credit or “C” or higher or equivalent.
Corequisite: None.
Recommendation: Teaching experience.
This course offers advanced information for administrators or directors in the child care professions. The student will explore legislative updates, current issues, families at risk, professionalism, Child Development Associates, National Association for the Education of Young Children Accreditation, and marketing strategies. This course meets the Department of Social Services Classification Indicator DS 6.

CDEC 111
PRINCIPLES AND PRACTICES IN EARLY CHILDHOOD EDUCATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides a survey of the field of Early Childhood Education emphasizing history and recent trends. It includes an introduction to different types of programs and the vocational opportunities available. Field trips to schools for young children will be featured. This course meets the Department of Social Services Classification Indicator DS 3.
Transfer Credit: CSU

CDEC 112
EARLY CHILDHOOD EDUCATION CURRICULUM 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This introductory course presents current concepts in childhood curriculum development and implementation. Emphasis is placed on developmentally appropriate curricular practices for an effective program for young children. The student will construct curriculum and assess its appropriateness in meeting diverse needs, levels of functioning and interest of children. This course meets the Department of Social Services Classification Indicator DS 3.
Transfer Credit: CSU

CDEC 113
THE CHILD, FAMILY, AND COMMUNITY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a course for anyone who deals with children: parents, teachers, and professionals in human services. Topics discussed are the influences on children’s growth and development by the family, the school, child-care facilities, the peer group, the mass media, and the community. Also examined are how these forces interact to社会化 and produce the child’s values, morals, attitudes, behavior, and self-esteem. This course meets the Department of Social Services Classification Indicator DS 2.
Transfer Credit: CSU
PRACTICUM 3 UNITS
EARLY CHILDHOOD EDUCATION
Indicator DS 7. (Formerly CDEC 61)
Department of Social Services Classification Indicator DS 3.
Transfer Credit: CSU

CDEC 133
EARLY CHILDHOOD EXPERIENCES
IN MATHEMATICS AND SCIENCE 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: CDEC 112 or equivalent with a grade of Credit or “C” or higher.
This course will acquaint the student with developmentally appropriate mathematics and science activities for pre-kindergarten children. Activities for this age group in counting, sets, earth and life sciences, classification of objects, and cooking experiences will be presented. This course meets the Department of Social Services Classification Indicator DS 3.
Transfer Credit: CSU

CDEC 161
NUTRITION, HEALTH AND SAFETY IN
CHILDREN'S PROGRAM 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course offers an opportunity to study the attitudes and habits essential for the general physical health, mental health, and safety of teacher, parent, and child. Topics covered are the following: nutrition; school menus; common childhood diseases; federal, state, and local nutrition and safety regulations; and other special health problems of Early Childhood Education Programs. Instruction includes health-protection resources provided by home, school, and community. This course meets the Department of Social Services Classification Indicator DS 3.
Transfer Credit: CSU

CDEC 164
EARLY CHILDHOOD EDUCATION
PRACTICUM 3 UNITS
Class hours: 2 lecture, 3 lab
Prerequisite: CDEC 111 and CDEC 112 or equivalent with grades of Credit or “C” or higher.
This course is designed to provide an opportunity for students placed in the Cerritos College Child Development Center and off-site practica to explore the relationship between theory and practice in programs for young children. The course includes both lecture and laboratory experiences during which students will examine developmental issues, the role of the teacher/caregiver in early childhood programs, and the relationship between programs and families. Students will explore and practice techniques for the observation and recording of behavior; examine environments for young children; and plan, implement, and evaluate developmentally appropriate, culturally relevant experiences for young children. Students spend 3 hours/week in placement for a total of 54 hours/semester. TB clearance and good health are required to participate in this course. This course meets the Department of Social Services Classification Indicator DS 3.
Transfer Credit: CSU

CDEC 173/174
EARLY CHILDHOOD EDUCATION OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Early Childhood Education work experience 173 or 20 hours of employment per week for Early Childhood Education work experience 174. The employment must be in a job related to the student’s educational goal.
Prerequisite: None.
Corequisite: Enrollment in Child Development vocational program of 7 or more units in major including Occupational Work Experience. Occupational Work Experience is a supervised employment program in an approved work station related to the student’s declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experience that are new or an expansion of their regular responsibilities. This course may be taken a maximum of 4 times based on the number of hours on the job. This course meets the Department of Social Services Classification Indicator DS 3.
Transfer Credit: CSU

CDEC 230
ADULT SUPERVISION IN
CHILD CARE PROGRAMS 3 UNITS
Class hours: 3 lecture
Prerequisite: CD 110, CDEC 111, CDEC 112, and CDEC 113 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is a study of the methods and principles of supervising student teachers, assistant teachers, parents and volunteers in early childhood education/child development classrooms. Emphasis is on the role of the classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents, and other staff. This course meets the requirement for a course in adult supervision for the California Child Development Permit.
Transfer Credit: CSU

CDFC 10 (Not degree applicable)
FAMILY CHILD CARE PROVIDERS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed for a person interested in or already managing a child care business in the home. Licensing procedures, appropriate standards, recruitment of children, cultural issues, provision and maintenance of a safe and stimulating environment, nutrition programs, community resources, record keeping and other business aspects are covered. Emphasis is on nurturing children, working cooperatively with parents, and the importance of a good self-concept for the child and the family child care provider.

CHILD DEVELOPMENT/INSTRUCTIONAL AIDE
(Health Occupations Division)

CDIA 73/74
EDUCATIONAL PARAPROFESSIONAL
OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hours control class each week plus 15 hours of employment per week for Instructional Aide work experience 73 or 20 hours of employment per week for Instructional Aide work experience 74. The employment must be in a job related to the student’s educational goal.
Corequisite: Enrollment in the Instructional Aide vocational program with 7 or more units including occupational work experience. Occupational Work Experience is a supervised employment program in an approved workstation related to the student’s declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or an expansion of their regular responsibilities. Students who are not employed but wish to gain work experience may be placed in a non-paying position if such opportunities are available. These courses may be taken for a maximum of 2 times based on the number of hours on the job.

CDIA 90
INTRODUCTION TO ELEMENTARY
AND SECONDARY CLASSROOM EXPERIENCES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to introduce students to principles of classroom experiences. In addition to the dynamics of grade level instruction,
emphasis is placed on how children learn, the curriculum of the classroom, discipline and guidance techniques and the role of the paraprofessional or volunteer within a school setting. Attention will be placed on bilingual, multicultural instruction, and special education.

**CDIA 99**
**EDUCATIONAL PARAPROFESSIONAL PRACTICUM** 3 UNITS
Class hours: 1 lecture/6 lab
Prerequisite: None.
This course offers the student the opportunity to work as an instructional aide under the supervision of professional staff in an elementary or secondary school setting. Content will include developing skills, techniques, and strategies for working in the multilingual/multicultural classroom. Classroom placement will be arranged for those students not employed by a school district. This course may be taken a maximum of 2 times.

**CHILD DEVELOPMENT/INFANT TODDLER**
*(Health Occupations Division)*

**CDIT 50**
**INFANT/TODDLER CARE GIVING** 3 UNITS
Class hours: 3 lecture
Prerequisite: CD 110 or equivalent with a grade of Credit or “C” or higher.
The principles of a sound infant/toddler care program are explored. The course content includes roles of the director, teacher and aide, laws and regulations, and considerations relating to learning objectives, developmental needs and other key factors. This course meets the Department of Social Services Classification Indicator DS 4.

**CDIT 151**
**INFANT AND TODDLER DEVELOPMENT** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: CD 110 or equivalent with a grade of Credit or “C” or higher.
This course is an in-depth investigation of the social, emotional, physical, and cognitive development patterns of infants and toddlers, both theoretically and through direct observation. This course meets the Department of Social Services Classification Indicator DS 4. (Formerly CDIT 51)
*Transfer Credit: CSU*

**CDIT 152**
**INFANT AND TODDLER PROGRAMS** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None
Recommendation: CD 110 and CDIT 51 or equivalent with grades of Credit or “C” or higher.
This course explores program models for children from birth to three years of age, addressing program goals, philosophies, curriculum, building relationships with infants, toddlers and families, safety routines, physical space and equipment, as well as infant and family needs especially in a group setting. This course meets the Department of Social Services Classification Indicator DS 4. (Formerly CDIT 52)
*Transfer Credit: CSU*

**CHILD DEVELOPMENT/SCHOOL AGE**
*(Health Occupations)*

**CDSA 152**
**SCHOOL-AGE CHILD CARE SUPERVISION AND ADMINISTRATION** 3 UNITS
Class hours: 3 lecture
Prerequisite: CD 110 or equivalent with a grade of Credit or “C” or higher.
This course presents the principles of administration and supervision of school-age child care programs. Emphasized are the role of the director, teacher, and aide; laws and regulations; and a study of objectives, curricula, developmental needs, and other key factors for operating such programs. The unique features of before-and-after-school care as opposed to the regular school day will be stressed. This course meets the Department of Social Services Classification Indicator DS 6.
*Transfer Credit: CSU*

**CDSA 155**
**SCHOOL-AGE CHILD CARE ACTIVITIES** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course presents activities for the 6-12 year-old child in an extended day care setting. Focus is on cognitive, physical, psychosocial, and creative aspects of development, as well as positive approaches to guidance. This course meets the Department of Social Services Classification Indicator DS 5.
*Transfer Credit: CSU*

**CDSA 259**
**SCHOOL-AGE CHILD CARE PRACTICUM** 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: CDSA 155 or equivalent with a grade of Credit or “C” or higher.
This course provides practical experiences in an extended child care program. It provides the opportunity to assist the teacher in the Center by planning, preparing, and implementing activities with school-age children. Students will also explore guidance techniques, room environment, tutoring, record keeping, and other extended child care responsibilities. This course meets the Department of Social Services Classification Indicator DS 5.
*Transfer Credit: CSU*

**CHILD DEVELOPMENT/PARENT EDUCATION**
*(Health Occupations Division)*

**CDPE 10** *(Not degree applicable)*
**INTRODUCTION TO FAMILY DEVELOPMENT** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course offers the student a comprehensive introduction to the process of parenting from conception through adolescence. It offers an appreciation of challenges and pleasures of parenting as well as practical solutions to common problems.

**CHILD DEVELOPMENT/SPECIAL EDUCATION**
*(Health Occupations Division)*

**CDSE 50**
**SURVEY OF SPECIAL EDUCATION** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course surveys the field of special education emphasizing the role of the Special Education Assistant in the training of the exceptional individuals. It includes an introduction to the types of special need children and adults, the function of the assistant, and the vocational opportunities available.

**CDSE 52**
**SPECIAL EDUCATION INCLUSION IN EARLY CHILDHOOD PROGRAMS** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a comprehensive overview of early childhood inclusion as it applies to children from birth to age eight. It offers a broad study of early childhood special education as it relates to inclusion. The course will cover federal and state laws and regulations, terminology and definitions, appropriate practices and interventions, behavioral issues, family support and guidance and “whole child/whole family” approach to inclusion success.

**CDE 73/74 SPECIAL EDUCATION ASSISTANT OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS**

Class hours: One (1) hour control class each week plus 15 hours of employment per week for Special Education Assistant work experience 73 or 20 hours of employment per week for Special Education Assistant work experience 74. The employment must be in a job related to the student's educational goal.

Prerequisite: None.

Corequisite: Enrollment in the Special Education Assistant vocational program with 7 or more units including occupational work experience.

Occupational Work Experience is a supervised employment program in an approved work station related to the student’s declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. This course may be taken a maximum of 4 times based on the number of hours on the job. This course meets the Department of Social Services Classification Indicator DS 3.

**COMPUTER AND INFORMATION SCIENCES**

*(Science, Engineering and Math Division)*

**CIS 5C** *(Not degree applicable)*

**BUSINESS COMPUTER INFORMATION SYSTEMS DATABASE MODULE 0.5 UNITS**

Class hours: 1.5 lecture/2.5 lab

Prerequisite: None.

Corequisite: None.

Recommendation: Fluency in Spanish is strongly recommended.

This course instructs the students, in a bilingual mode (Spanish), in the use of microcomputers within the business environment using the Microsoft Windows interface and the Microsoft Office Professional application suite (Word, Excel, Access, and Powerpoint). Students learn basic aspects of microcomputer software applications using a modular approach. The module will include topics in file management, creation/maintenance of backups, formatting disks, and the basic concepts and use of a database application. This course may be taken a maximum of 2 times. (Not open to students with credit in CIS 102).

**CIS 50 BASIC COMPUTER LITERACY 0.5 UNIT**

Class hours: 4 lab

Prerequisite: None.

Corequisite: None.

Recommendation: None.

This course provides the student with a basic overview of the components of a computer and application software. This course is for the student who is not familiar with the use of the computer and its applications. Topics will include a basic introduction to computer systems hardware, Windows, Word, Excel, and PowerPoint. The class stresses hands-on use of the computer with its applications.

**CIS 52 DATA PROCESSING MATHEMATICS 3 UNITS**

Class hours: 3 lecture

Prerequisite: Satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Credit or “C” or higher.

Corequisite: None.

Recommendation: None.

This course will provide students with an understanding of basic mathematical concepts, as used in computer applications. Students will solve problems in fundamental algebra using linear and nonlinear functions, study inventory statistics and probability and their relationships to each other, and learn to set up and solve formula relationships, including direct and indirect proportions. Other topics will include number systems, logic, mathematics of elementary finance, table structures, Boolean algebra, and basic geometric concepts, including some coordinate geometry.

**CIS 54A EXCEL FOR WINDOWS - PART 1 1.5 UNITS**

Class hours: 3 lecture/2 lab

Prerequisite: None.

Corequisite: None.

Recommendation: Student should be familiar with any Windows environment, version 3.0 or higher. The student preparing for this exam should also enroll in CIS 56.

This course is designed to help the student prepare for the Windows portion of the DOS/Windows certification test for the CompTIA A+ certification exam. The A+ certification consists of two exams: (1) a basic knowledge of PC hardware; (2) familiarity with installing and maintaining DOS, Windows 3.x, and Windows 95/98. The hardware portion is covered in EL 54.

**CIS 54B EXCEL FOR WINDOWS - PART 2 1.5 UNITS**

Class hours: 3 lecture/2 lab

Prerequisite: CIS 54A or equivalent with a grade of Credit or “C” or higher.

Corequisite: None.

Recommendation: None.

This course continues to explore the functions of the Microsoft Excel for Windows spreadsheet. The fundamentals of building worksheets will include creating worksheets, formatting, functions, formulas, macros, data tables, analysis tools, and the creation of charts. Techniques to deal with multiple worksheets and large worksheets will be covered. The database functions of Excel will include: sorting, filtering, queries, macros, and record retrieval. Hands-on exercises will be used to reinforce the functions of Excel.

**CIS 56 MICRO DISK OPERATING SYSTEMS 1.5 UNITS**

Class hours: 3 lecture/2 lab

Prerequisite: None.

Recommendation: CIS 101 or CIS 102 or equivalent with a grade of Credit of “C” or higher.

This course is designed to acquaint students with the functions of the MS-DOS operating system. Students will learn the basics of the MS-DOS operating system required to prepare them for the MS-DOS portion of the MS-DOS/Windows exam for the A+ and Network+ certifications.

**CIS 58 WINDOWS FOR COMPTIA A+ CERTIFICATION EXAMS 1.5 UNITS**

Class hours: 3 lecture/2 lab

Prerequisite: None.

Corequisite: None.

Recommendation: None.

This course is designed to help the student prepare for the Windows portion of the DOS/Windows certification test for the CompTIA A+ certification exam. The A+ certification consists of two exams: (1) a basic knowledge of PC hardware; (2) familiarity with installing and maintaining DOS, Windows 3.x, and Windows 95/98. The hardware portion is covered in EL 54.
CIS 70A
PC OPERATING SYSTEMS A+ CERTIFICATION  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 101 or CIS 102 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course is designed to cover the subject matter required for the operating systems component of CompTIA’s A+ Certification. Topics to be discussed include operating system installation, configuration, upgrading, troubleshooting, repair, networking, Internet connectivity and wireless technologies. This course may be taken a maximum of 3 times.

CIS 70B
PC CORE HARDWARE A+ CERTIFICATION  3.5 UNITS
Prerequisite: None
Corequisite: None
Recommendation: CIS 101 or CIS 102 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course is designed to cover the subject matter required for the core hardware component of CompTIA’s A+ Certification. Topics to be discussed include computer hardware installation, construction, upgrading, troubleshooting, repair, networking, Internet connectivity and wireless technologies. This course may be taken a maximum of 3 times.

CIS 70C
NETWORKING FUNDAMENTALS  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 101 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This is a survey course about the computer networking and telecommunications industry. Topics covered include the seven layers of the Open Systems Interconnection Model (OSI), network architectures, internetworking, and telecommunications.

CIS 70D
INTRODUCTION TO TCP/IP  1.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 70A or equivalent with a grade of Credit or “C” or higher.
This course offers an overview of the most widely-used networking architecture in the networking industry: Transport Control Protocol/Internet Protocol (TCP/IP). Students will learn the underlying applications, protocols and components of TCP/IP and its necessary link to the Internet, and how to identify TCP/IP layers, components, and functions. Navigation tools, TCP/IP services, and troubleshooting methodologies are also reviewed. Topics include usage of TCP/IP applications, structure of TCP/IP addressing and subnetting, how TCP/IP addresses are discovered and used in computer networks, IP routing and router usage, and troubleshooting a TCP/IP network.

CIS 70E
ROUTER CONFIGURATIONS AND PROTOCOL  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 70A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is the second course of four on Cisco networking technologies. It covers the OSI reference model, routers and their use, router components, router start-up and set-up, configurations, and the Cisco Internetworking Operating Systems (IOS).

CIS 70F
ADVANCED SWITCHING AND ROUTING  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 70E or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is the third in a series of courses that prepares students for certification as a Cisco Certified Network Associate (CCNA). This class covers LAN (Local Area Network) Switching, VLANs (Virtual Local Area Networks), LAN design, IGRP (Interior Gateway Routing Protocol), Access lists, and Novell IPX.

CIS 70G
WIDE AREA NETWORKS  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 70E or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is the fourth in a series of courses that prepares students for certification as a Cisco Certified Network Associate (CCNA). It covers Wide Area Network (WAN) design, Point-to-Point Protocol (PPP), Integrated Services Digital Network (ISDN), Frame Relay, and CCNA exam review.

CIS 70H
NETWORKING ANALYSIS AND DESIGN  2.5 UNITS
Class hours: 5 lecture
Prerequisite: CIS 70F or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course focuses on the design process for computer networking. Concepts and skills developed in previous courses in this series form the foundation for approaching the task of defining network requirements, writing specifications, designing, and implementing a computer network.

CIS 70I
CCNA CERTIFICATION EXAM REVIEW  1.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 70G or equivalent with a grade of Credit or “C” or higher.
This course is designed to enhance student readiness for the Cisco Certified Network Associate (CCNA) exam. It reviews all key concepts and skills required in the CCNA exam as well as exam question types and test-taking strategies.

CIS 70K
INTRODUCTION TO WIRELESS NETWORKING  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 70A or equivalent with a grade of Credit or “C” or higher.
This is an introductory course on the fundamental concepts of wireless networking. It covers the technical foundation of wireless communications and various protocols used in the current wireless applications. Topics include Wireless Application Protocol (WAP), Bluetooth, cellular telephony, Wireless
Local Area Networks (WLANs), satellite communications, Global Positioning System (GPS).

CIS 70L
NETWORK SECURITY FUNDAMENTS 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 70A or equivalent with a grade of Credit or “C” or higher.
This is an introductory course on fundamentals of network security. It provides a comprehensive overview of network security and covers communication security, infrastructure security, cryptography, operational, organizational security, disaster recovery, business continuity, as well as computer forensics. The course content also maps to the Security+ certification exam by Computing Technology Industry Association (CompTIA).

CIS 84
MICROSOFT INTERNET INFORMATION SERVER 1.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Strongly recommend CIS 212 or CIS 212B and CIS 121 or equivalent with grades of Credit or “C” or higher.
This course covers the support of the various features of Microsoft Internet Information Server (IIS). Students will learn how to install, configure, and implement the key components that comprise IIS. They will also have hands-on experience setting up a Web site. The course is intended for those who support or administer Microsoft Internet Information Server. The course uses a combination of lectures, demonstrations, discussions, online assignments, and hand-on labs. This course is compliant with current industry certification.

CIS 85
UNIX PRODUCTIVITY TOOLS 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 56 with a grade of Credit or “C” or higher is strongly recommended.
This course is designed for students in computer science to introduce them to basic productivity tools that are available on the UNIX platform. These tools include the basic command-line and menu-driven utilities such as vi, emacs, mail and pico; the GUI (Graphical User Interface) tools such as GNUwrite and GNUmeric; and the advanced, integrated productivity suites such as StarOffice, which will be discussed in detail. Other advanced tools such as the GIMP (GNU Image Manipulation Program) will be presented so that students will be able to use, configure and support these applications.

CIS 101
INTRODUCTION TO COMPUTER INFORMATION SYSTEMS 3 UNITS
Class hours: 3 lecture +1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
This course provides students with the knowledge and skills required to install, configure, administer, trouble-shoot, and implement the Microsoft SQL server database management system.

CIS 102
INTRODUCTION TO MICROCOMPUTER HARDWARE AND APPLICATIONS SOFTWARE 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
This course instructs the students in the use of microcomputers within an organizational environment using the Microsoft Windows interface and current applications software. Software topics include file management, elementary word processing, applications in spreadsheet use, database management, and presentation graphics.
Transferred Credit: CSU; UC*
*UC credit limits may apply: CIS 101 and 102 combined: maximum credit, one course.

CIS 103
COMPUTER PROGRAMMING LOGIC 3.5 UNITS
Class hours: 3 lecture /2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Concurrent enrollment in or completion of CIS 101 or CIS 102 or equivalent with a grade of Credit or “C” or higher.
This is an introductory course in computer programming logic. The student will learn concepts applicable to all programming languages, including: identifiers, data types, arrays, control structures, algorithms, modular programming, generating reports, and computer memory concepts. The student will learn to use charts commonly used in business and information processing. Program logic will be developed using flow-charts and pseudocode. Programs will be written using a programming language. The student will be introduced to the following additional topics: graphical user interface design, object-oriented-and event-driven-programming, searching, sorting, and file processing concepts.
Transferred Credit: CSU; UC

CIS 105
USING MICROSOFT WINDOWS 1.5 UNITS
Class hours: 3 lecture +1 hr. lab. arr.
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 102 or equivalent with a grade of Credit or “C” or higher.
This course covers the use of Microsoft Windows. Currently available Windows Operating Systems will be explored, including Windows 95, 98, NT, Millennium Edition, and Windows 2000. Topics include file and application management, personalizing the system, using the productivity tools, connecting

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

216
This course introduces the student to the operations of the IBM iSeries 400 Computer System using the OS/400 operating systems. The course includes the following topics: navigating around the system, command structure, message handling, Operation Navigator, trouble shooting, system security, job scheduling, backup/restore, work management, library management, object management, control management, and control language programming.

Transfer Credit: CSU

CIS 141A
OPERATIONS NAVIGATOR
ISERIES (AS/400) 1.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 141 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course will introduce the student to operating an iSeries 400 (AS/400) through the graphical interface Operations Navigator (ON). Operations Navigator will be used to configure, monitor, and manage the iSeries 400 (AS/400). Topics include basic operations, printing, job management, device configuration, security, database management, file systems, backup, and user/groups. This course is primarily for Information Technology professionals with some background in the AS/400 operations.
Transfer Credit: CSU

CIS 142A
AS/400 OPERATIONS-PART 1 1.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 101 or equivalent with a grade of Credit or “C” or higher.
This course introduces the student to the operations of the IBM AS/400 Computer System using the OS/400 operating system. The course includes the following topics: system security, job scheduling, job management, back/restore, work management, library management, object management, hardware architecture and configuration, software, device management, and control language.
Transfer Credit: CSU

CIS 142B
AS/400 OPERATIONS/FACILITIES-PART 2 1.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 101 or equivalent with a grade of Credit or “C” or higher.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course introduces the student to the IBM AS/400 Computer System OS/400 database and file structure. This course will use IBM AS/400's Application Development Tools. The course includes the following topics: Source Editor Utility (SEU), Data File Utility (DFU), Program Development Manager (PDM), Screen Design Aid (SDA), Data Description Specifications, Data file structure and design, physical source file, Library, object, member structure, logical files, display files, menus and simple control language program.

Transfer Credit: CSU

CIS 155
MICROSOFT ACCESS
3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides the skill and concepts needed to use the functions of the spreadsheet Microsoft Excel for Windows. This course is a foundation class for Information Technology. The fundamentals of building worksheets include: creating worksheets, for-matting, functions, formulas, macros, data tables, analysis tools, templates, Wizards, and the creation of charts. Techniques to deal with multiple worksheets and large worksheets are covered. The database functions of Excel will include sorting, filtering, queries, macros, and record retrieval. This course covers the topics required in industry certifications. Hands-on exercises are used to reinforce the function of Excel. This course is not open to students who have taken both CIS 54A and CIS 54B.

Transfer Credit: CSU

CIS 155A
MICROSOFT ACCESS
CORE LEVEL 1.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to database function on IBM compatible personal computers using Microsoft Access for Windows software. Topics include Core Level MOUS Skills for Microsoft Access functions such as creating a database table; creating relationships between database tables, creating forms, reports, mailing labels, and charts; using Database Wizards and OfficeLinks. This course prepares the student for Microsoft Office User (MOUS) Access Core Certification.

Transfer Credit: CSU

CIS 155B
MICROSOFT ACCESS
EXPERT LEVEL 1.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 155A or equivalent with a grade of Credit or "C" or higher or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course emphasizes advanced database functions on the IBM compatible personal computers using Microsoft Access for Windows software. Topics include Expert Level MOUS Skills for Microsoft Access functions such as building and modifying advanced tables, building and modifying forms, refining queries, using advanced report features, defining relationships, and using Access tools. This course prepares the student for Microsoft Office User (MOUS) Access Expert Certification, which is in the process of being prepared by Microsoft Office.

Transfer Credit: CSU

CIS 160
WEB PAGE DEVELOPMENT 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 205.
This course provides the knowledge, skills, and hands-on experience needed to create multi-media Web pages. Students will create Web pages with links, graphics, tables, frames, and form application, as well as dimensions of time, audio, video, motion, and interactivity to Web pages using variety of authoring tools. Upon completing this course, students will be ready to plan, build, promote, and maintain a professional Web site, which includes selecting a Web host and uploading the site to a Web server.

Transfer Credit: CSU

CIS 156C
SPECIAL TOPICS IN NETWORKING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide training on the application of networking solutions to various industry specific situations. Each semester the course will focus on a different aspect of networking. Examples include but are not limited to, automotive, aviation, entertainment industry, health care, home automation, industrial control, IP version 6, and recent developments in Local Area Networking (LAN) and Wide Area Networking (WAN). This course may be taken a maximum of 2 times.

Transfer Credit: CSU

CIS 169A
SPECIAL TOPICS IN SECURITY 1 UNIT
Class hours: 1 lecture/1 arr.
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide basic information on the latest technological developments in the information security field. Students will learn about the latest security issues in the enterprise network as well as various tactics and tools to counter those security threats. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

CIS 169D
SPECIAL TOPICS IN SECURITY 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide in-depth training on the latest software and hardware technology used in the enterprise network security field. Students will learn about and research the latest security threats in an organization. They will also explore various tactics and tools to counter those security threats and implement them in the enterprise network. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

CIS 171
VISUAL BASIC PROGRAMMING 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 103 or equivalent with a grade of Credit or “C” or higher.
This is a course in designing and programming of the MS-Windows graphical user interface. Topics include standard interface design, event processing and control focus, data exchange, debugging and error handling.

Transfer Credit: CSU; UC

CIS 175

RPG PROGRAMMING 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This is a basic course in applying the principles of data processing to standard business applications. The Report Program Generator language will be used, with emphasis on report preparation and file organization. The class introduces the student to CODE/400, a client-server pc-based application development environment. Operations Navigator, a graphical user interface used to create, change and maintain iSeries/400 objects, and also to the Integrated Language Environment (ILE).
Transfer Credit: CSU; UC

CIS 176

COBOL PROGRAMMING 3 UNITS
Class hours: 3 lecture + 1 hr. lab. arr.
Prerequisite: CIS 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This is an introductory course in computer programming, utilizing the most frequently used procedural language for business applications—COBOL. COBOL is a “near English” language which provides for thorough documentation of the program, and enables programmers to program on all major manufacturers’ equipment with minimum of adjustment. The purpose, structure, content and specific rules of the language will be considered in detail. Business applications will be analyzed, flowcharted, coded and debugged using the computer. Structured programming concepts will be introduced. COBOL lab problems will be assigned.
Transfer Credit: CSU

CIS 178

(PROGRAMMING IN FORTRAN 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: MATH 140 or equivalent with a grade of Credit or “C” or higher and satisfactory score on the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This is an introductory level programming course using the Fortran programming language. Emphasis is placed on engineering and mathematics applications. Topics include input/output techniques, declaration statements, data types, branching, loops, arrays, subroutines, functions, passing parameters, sorting and searching.
Transfer Credit: CSU; UC

CIS 178A

JAVA PROGRAMMING 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Strongly recommend CIS 103 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course covers the fundamentals of the Java programming language used to develop Web-delivered Internet and platform-independent enterprise applications. Features of Java covered in this course include basic Java programming constructs, object oriented programming, and the graphical user interface (GUI).
Transfer Credit: CSU; UC

CIS 180

PROGRAMMING IN C/C++ 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This course introduces C and C++ programming language structures. Topics include data types, operators, program control flow, arrays, functions, pointers, character strings, structures and pointers. This course also includes an introduction to object-oriented programming design. (This course is not open to students who have taken BCIS 95.)
Transfer Credit: CSU; UC

CIS 180A

UNIX PROGRAMMING IN C/C++ 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 180 and CIS 214 (or CIS 215A) with grades of Credit or “C” or higher, or appropriate work experience.
This course introduces the student to programming on the Unix platform. Topics include the programming environment, editing, preprocessing, compiling, linking, static and dynamic binding, debugging, and the application programming interface (API) to the Unix operating system. Topics specific to the Unix API include standard I/O (input/output), the Unix file system interface, Unix signal processing, process management, and terminal I/O.
Transfer Credit: CSU

CIS 180B

JAVA PROGRAMMING 3.5 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on Graphical User Interface (GUI) components.
Transfer Credit: CSU

CIS 181A

SPECIAL TOPICS IN SOFTWARE DEVELOPMENT 1 UNIT
All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

CIS 182

JAVA PROGRAMMING 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with the knowledge and skills needed to develop Microsoft.NET-based applications by using Visual Basic.NET. This course focuses on Graphical User Interface (GUI) components.
Transfer Credit: CSU

CIS 186

VISUAL BASIC.NET PROGRAMMING 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 103 or equivalent with a grade of Credit or “C” or higher or knowledge of one programming language.
Corequisite: None.
Recommendation: None.
This course provides students with the knowledge and skills needed to develop Microsoft.NET-based applications by using Visual Basic.NET. This course focuses on Graphical User Interface (GUI) components.
Transfer Credit: CSU

CIS 189A

SPECIAL TOPICS IN SOFTWARE DEVELOPMENT 1 UNIT
All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

CIS 189B

VISUAL BASIC.NET PROGRAMMING 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 103 or equivalent with a grade of Credit or “C” or higher or knowledge of one programming language.
Corequisite: None.
Recommendation: None.
This course provides students with the knowledge and skills needed to develop Microsoft.NET-based applications by using Visual Basic.NET. This course focuses on Graphical User Interface (GUI) components.
Transfer Credit: CSU

CIS 189C

SPECIAL TOPICS IN SOFTWARE DEVELOPMENT 3 UNITS
All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

Transfer Credit: CSU; UC credit determined after admission
This course introduces students to new software application designs in the information technology industry. The focus of the course includes programming language structure, programming implementation, and application design. Students may take a combination of CIS 189A, CIS 189B, and/or CIS 189C, no more than a total of 4 times.

Transfer Credit: CSU, UC credit determined after admission

CIS 189D
SPECIAL TOPICS IN SOFTWARE DEVELOPMENT 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 103 or equivalent with a grade of Credit or “C” or higher.
This is a software development course designed to acquaint the student with new, languages in the information technology industry. The course will focus on programming language structure, programming implementation, and application design. This course may be taken a maximum of 2 times.
Transfer Credit: CSU, UC credit determined after admission

CIS 201
SYSTEMS ANALYSIS AND DESIGN 3 UNITS
Class hours: 3 lecture +1 hr. lab arr.
Prerequisite: None.
This course is a detailed study of business data processing systems analysis and design theory and application techniques including: interviewing techniques, systems functions, surveys, flowcharting, analysis, and design. Attention is given to the role of the analyst within the business environment.
Transfer Credit: CSU

CIS 202A
PROJECT MANAGEMENT FOR INFORMATION TECHNOLOGY 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 102 and CIS 105 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
This course covers the principles of project management as it applies to the field of Information Technology (IT). Students learn how to plan, execute, and control complex IT systems projects using Microsoft Project. Information technology projects are used to practice and gain “real world” exposure to the complexities and challenges of managing an IT systems development project.
Transfer Credit: CSU

CIS 205
PROGRAMMING IN HTML FOR THE WORLD WIDE WEB 1.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 103 or CIS 121 or equivalent with a grade of Credit or “C” or higher.
This course covers the fundamentals of the HTML (Hypertext Markup Language) language used to construct pages and documents on the World Wide Web. Features of HTML covered in this course include basic page structure, formatting, linking, handling images, handling color, tables, frames, forms, external media, plug-ins, linked windows, dynamic documents, and image maps.
Transfer Credit: CSU

CIS 206
XML WEB APPLICATION DEVELOPMENT 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 205 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course covers the purpose and scope of eXtensible Markup Language (XML). The course will cover XML-related technologies and standards to develop dynamic, data-driven Web applications. Topics include XML structure and syntax, eXtensible Hypertext Markup Language (XHTML), Document Type Definition (DTD) and schemas validation, Cascading Style Sheet (CSS), XML as linking and searching mechanism, eXtensible Style Sheet (XSL) for formatting-object documents, Documents Object Model (DOM), and Simple API for XML (SAX) for parsing and transforming XML.
Transfer Credit: CSU

CIS 207
DATABASE DESIGN AND SQL 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 105 or equivalent with a grade of Credit or “C” or higher.
This course covers the concepts of designing, creating, and accessing Relational Data Base Management Systems using Structured Query Language (SQL). The database programming is based on Microsoft SQL.
Transfer Credit: CSU

CIS 208A
ORACLE SQL AND PL/SQL 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 103 and CIS 155 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
This course covers the concepts of Structured Query Language (SQL) in the SQL *Plus environment, and Oracle’s Procedural Language/Structured Query Language (PL/SQL) programming languages for working with relational databases. The students will learn the creation of database objects and the storage, retrieval, and manipulation of data using the Oracle database management system.
Transfer Credit: CSU

CIS 208B
ORACLE DATABASE APPLICATIONS 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 208A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
This course covers the concepts needed to develop database applications using the Oracle database and application development utilities. Students will learn how to create and modify database tables and queries and how to design user interfaces, reports, forms, and graphical charts for database applications.
Transfer Credit: CSU

CIS 209
ORACLE DATABASE ADMINISTRATION AND IMPLEMENTATION 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 212 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course provides a hands-on knowledge of planning, configuring, and managing an Oracle database system. The student will learn how to configure a server, manage system resources, create a database, manage users, provide backup and recovery practices, and develop a security model.
Transfer Credit: CSU

CIS 211A
SPECIAL TOPICS IN DATABASE 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to recent advancements of database systems in information technology. The focus of this course will be database administration, programming, and security. The specific focus of a particular offering will be decided by the course instructor and announced in the Schedule of Classes. Students may take a combination of CIS 211A, CIS 211B, and/or CIS 211C, no more than a total of 4 times.

Transfer Credit: CSU

CIS 211B
SPECIAL TOPICS IN DATABASE  2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to recent advancements of database systems in information technology. The focus of this course will be database administration, programming, and security. The specific focus of a particular offering will be decided by the course instructor and announced in the Schedule of Classes. Students may take a combination of CIS 211A, CIS 211B, and/or CIS 211C, no more than a total of 4 times.

Transfer Credit: CSU

CIS 211C
SPECIAL TOPICS IN DATABASE  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to recent advancements of database systems in information technology. The focus of this course will be database administration, programming, and security. The specific focus of a particular offering will be decided by the course instructor and announced in the Schedule of Classes. Students may take a combination of CIS 211A, CIS 211B, and/or CIS 211C, no more than a total of 4 times.

Transfer Credit: CSU

CIS 212
WINDOWS 2000 PROFESSIONAL AND SERVER  3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 212A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is a course for system administrators who are responsible for installing and administrating networks based on Windows 2000. Students will learn to install, configure, and optimize Windows 2000, including network inter-operability and trouble shooting.

Transfer Credit: CSU

CIS 212A
MICROSOFT WINDOWS 2000 PROFESSIONAL  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 105 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides students with the knowledge and skills necessary to install and configure Microsoft Windows 2000 Professional on stand-alone and client computers that are part of a workgroup or domain. This course incorporates a hands-on approach to the learning material. It also prepares students for the Windows Microsoft certification exam 70-210- Installing, Configuring, and Administering Microsoft Windows 2000 Professional, which is one of the core requirements for the Microsoft Certified Systems Administrator (MCSA) and Microsoft Certified Systems Engineer (MCSE) certifications.

Transfer Credit: CSU

CIS 212B
MICROSOFT WINDOWS 2000 SERVER  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 212A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is a course for system administrators who are responsible for installing and administrating networks involving Microsoft Windows 2000 Servers. Topics include installing and configuring Windows 2000 Server, managing files, printing, Web and Terminal services, connecting clients, creating and managing user accounts, managing access to resources on the network, monitoring and optimizing server performance, implementing security and disaster protection and troubleshooting various server related issues. This course also prepares students for the Microsoft certification exam 70-215 – Installing, Configuring, and Administering Microsoft Windows 2000 Server, which is one of the core requirements for the Microsoft Certified systems Administrator (MCSA) and Microsoft Certified Systems Engineer (MCSE) certifications.

Transfer Credit: CSU

CIS 212C
MICROSOFT WINDOWS ACTIVE DIRECTORY SERVICES  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 212 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

Transfer Credit: CSU

CIS 213A
DESIGNING A MICROSOFT WINDOWS DIRECTORY SERVICES INFRASTRUCTURE  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 212 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.

This course provides an overview of Microsoft Windows Active Directory Services, used in the latest Microsoft network operating systems. It helps students develop knowledge and skills to install, configure, and administer Windows 2000 Active Directory Services, implement Group Policy, and perform the Group Policy-related tasks that are required to centrally manage users and computers. Students learn to set up and administer domain user accounts and groups, delegate administrative control of Active Directory objects in Windows 2000, create and manage trees and forests in a Windows 2000 network, administer forest-wide resources, manage Active Directory replication and operation master, manage and restore the Active Directory database, and implement an Active Directory infrastructure. The course also prepares students for the Microsoft Certified Professional (MCP) Exam 70-217- a core requirement on the Windows 2000 Microsoft Certified Systems Engineer (MCSE) track.

Transfer Credit: CSU

CIS 213B
IMPLEMENTING A WINDOWS 2000 NETWORK INFRASTRUCTURE  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 212 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course provides instruction in implementing and administering a Windows® 2000 network infrastructure. Topics include installing, configuring, managing, monitoring, and troubleshooting Domain Name System (DNS), Windows Internet Naming Service (WINS), Internet Protocol (IP) routing, Network Address Translation (NAT) and Certificate Services. This course covers the knowledge and skills needed for the Microsoft® 2000 Certified Professional (MCP) certification examination 70-216, Implementing and Administering a Microsoft Windows® 2000 Network Infrastructure, which is a core component for the Microsoft® Certified Systems Engineer (MCSE).

Transfer Credit: CSU

CIS 213C

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course provides students with the knowledge and skills necessary to design a Microsoft® Windows® 2000 directory services infrastructure in an enterprise network. Strategies are presented to assist the student in identifying the information technology needs of an organization, and then designing an Active Directory™ structure that meets those needs.

Transfer Credit: CSU

**CIS 213D**
**DESIGNING A MS WINDOWS 2000 NETWORK INFRASTRUCTURE**
2.5 UNITS
Class hours: 5 lecture
Prerequisite: CIS 212 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course provides students with the information and skills needed to create a networking services infrastructure design that supports the required network applications. It covers Microsoft® Windows® 2000 network solutions, such as Dynamic Host Configuration Protocol (DHCP), Open Shortest Path First (OSPF), Routing Information Protocol (RIP), and Internet Group Management Protocol (IGMP).
Transfer Credit: CSU

**CIS 213E**
**MANAGING WINDOWS 2000 NETWORK ENVIRONMENT**
3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 212 or equivalent with a grade of Credit or "C" or higher or appropriate work experience.
This course is to provide the knowledge required by System Administrators, Network Administrators, and Information Technology (IT) professionals to implement, manage and troubleshoot existing network and server environments based on the Microsoft Windows® 2000 platform. These skills are generally required in medium to large size organizations via Local Area Networks (LANs) and the Internet or Intranets. Additionally, this course provides the skills and knowledge that Microsoft Certified Systems Administrator (MCSA) certification candidates need to prepare for the Microsoft Certified Professional (MCP) Exam 70-218: Managing a Microsoft Windows 2000 Network Environment, a core component for the Microsoft® Certified Systems Administrator (MCSA) certification.
Transfer Credit: CSU

**CIS 213F**
**MICROSOFT WINDOWS 2003 SERVER ADMINISTRATION**
3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is to provide the knowledge required by system administrators, network administrators, and IT (Information Technology) professionals who implement, manage and troubleshoot network and server environments based on the Microsoft Windows® .Net platform. It offers up-to-date information on core system administration topics such as Active Directory services, security, disaster planning and recovery, and interoperability with NetWare and Unix. It includes information on Microsoft Internet Security and Acceleration (ISA) Server and scripting. Additionally, this course prepares students for the Microsoft Certified Professional (MCP) Exam 70-275, a core requirement on both the Microsoft Certified System Engineer (MCSE) and Microsoft Certified System Administrator (MCSA) tracks.
Transfer Credit: CSU

**CIS 213G**
**MICROSOFT EXCHANGE SERVER ADMINISTRATION**
3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 212B or equivalent with a grade of Credit or "C" or higher.
This course is to provide the knowledge required by System Administrators, Network Administrators, and IT (Information Technology) professionals who implement, manage and troubleshoot the Microsoft Exchange server. These skills are generally required in medium to very large computing environments that typically have multiple physical locations, mixed client connection protocols, and Internet messaging connectivity. In addition, this course is part of the Microsoft Certified Systems Engineer (MCSE) certification program series.
Transfer Credit: CSU

**CIS 213H**
**MICROSOFT WINDOWS SECURITY**
3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 212B or equivalent with a grade of Credit or "C" or higher.
This course will provide training in tools and procedures recommended by the security industries for the System Administrators, Network Administrators, and Information Technology (IT) professionals who design, implement, and manage the Microsoft windows network environment.
Transfer Credit: CSU

**CIS 214**
**UNIX**
3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Knowledge of one operating system.
This course is a comprehensive study of the Unix operating system and its administration. Topics include Unix commands, file manipulation and maintenance, user management, shell programming, configurations, back-up, security, and networking.
Transfer Credit: CSU

**CIS 215**
**UNIX INTERNET SERVICES**
3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 214 with a grade of Credit or "C" or higher is strongly recommended.
This course is designed for students in computer science to introduce basic installation, configuration, operation and support of intranet and Internet services hosted on the UNIX platform. Topics include LAN (Local Area Network) protocols such as DHCP (Dynamic Host Configuration Protocol), NIS (Network Information Service), NFS (Network File System), and UUCP (Unix to Unix CoPy) and WAN (Wide Area Network) protocols such as DNS (Domain Name Service), FTP (File Transfer Protocol), SMTP (Simple Message Transfer Protocol), IMAP Internet Message Access Protocol, POP (Post Office Protocol), HTTP (HyperText Transfer Protocol), and NNTP (Network News Transfer Protocol). Necessary supporting systems such as the Unix kernel's process structure hierarchy, file system and print services are also covered.
Transfer Credit: CSU

**CIS 215A**
**SOLARIS FUNDAMENTALS**
3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 56 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
An introduction to the Solaris[tm] Operating Environment for System Administrators teaches the beginning student how to use Unix® operating system commands and basic
Announcement of Courses

Solaris Operating Environment commands. This class is for new users of the Solaris environment. Students will learn fundamental command-line features of the Solaris Operating Environment including file system navigation, file permissions, the Visual(vi) Text Editor, command shells, and basic network use. This course is equivalent to Sun Microsystems course number SA-118.

Transfer Credit: CSU

CIS 215B

SOLARIS ADMINISTRATION I 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 214 or CIS 215A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course is an introduction to the essential tasks of stand-alone host operating system installation, file system management, backup procedures, process control, user administration, and device management on the SolarisTM Operating Environment for Sun workstations. This class is equivalent to Sun Microsystems course number SA-238 and leads to Sun certification.
Transfer Credit: CSU

CIS 215C

SOLARIS ADMINISTRATION II 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 215B or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course is an introduction to the essential skills necessary to administer Sun systems running Solaris in a network environment including maintenance of Sun Systems, configuring and troubleshooting the Network File System (NFS), and configuring the Network Information Service (NIS) network environment. This class is equivalent to Sun Microsystems course number SA-288 and leads to Sun certification.
Transfer Credit: CSU

CIS 221

ADVANCED VISUAL BASIC 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 171 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course familiarizes the students with client/server database programming, OLE (Object Linking and Embedding), DDE (Dynamic Data Exchange), API (Application Programming Interface), ActiveX controls, multimedia, and object-oriented programming design. The students develop practical business applications.
Transfer Credit: CSU

CIS 221A

OBJECT-ORIENTED PROGRAMMING IN VB.NET 3 UNITS
Class hours: 3 lecture/2 hrs. arr.
Prerequisite: CIS 186 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides the students with the knowledge and skills required to create and use .NET assemblies, multithreading and Internet communications.
Transfer Credit: CSU

CIS 221B

DATABASE AND WEB PROGRAMMING IN VB.NET 3 UNITS
Class hours: 3 lecture/2 hrs. arr.
Prerequisite: CIS 186 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course will provide students the skills to build database applications and web services using VB.NET.
Transfer Credit: CSU

CIS 222

ADVANCED RPG PROGRAMMING 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 175 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This is a second course in the use of the RPG programming language. Students are introduced to modular programming, static and dynamic binding, and the use of service programs in the Integrated Language Environment (ILE) and dynamic link libraries (DLL's) for pc-based standalone applications. VisualAge RPG is part of a suite of application development tools called WebSphere Development Tools/400.
Transfer Credit: CSU

CIS 223

BUILDING ISERIES/400 WEB APPLICATIONS WITH ILE RPG 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: CIS 175 and CIS 205 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is a course on designing web applications on an IBM (International Business Machines) iSeries/400 midrange computer using knowledge of HTML (Hyper Text Markup Language) and ILE RPG (Integrated Language Environment Report Program Generator). The course topics include configuring the HTTP (Hyper Text Transfer Protocol) server on the iSeries/400 and declaring HTTP server instances, JavaScript, TCP/IP (Transport Control Protocol/Internet Protocol), the iSeries/400 IFS (Integrated File System) and the use of APIs (Application Program Interfaces). The language RPG is used to create CGI (Common Gateway Interface) programs that “web enable” existing RPG programs that produce output to terminal screens or spoofed files for later printing.
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

223
CIS 224
ADVANCED COBOL PROGRAMMING 3 UNITS
Class hours: 3 lecture + 1 hr. lab, arr.
Prerequisite: CIS 176 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
This course is designed to extend both the students' skills in computer programming and their knowledge of the most frequently used language in business data processing. The emphasis will be on file processing and the advanced features of a high level implementation of COBOL including: COBOL Sort, Report Writer, Subroutine and Subprogram Linkage, COBOL Library, etc.
Transfer Credit: CSU

CIS 227
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE 1 UNIT
Class hours: 1 hr/week coordination class
Corequisite: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second-, third-, and fourth-semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This may be taken for a maximum of 3 times.
Transfer Credit: CSU

CIS 230
ASSEMBLY PROGRAMMING FOR MICROCOMPUTERS 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: CIS 177 (Pascal) and CIS 180 ("C" Language), or CIS 178 (Fortran) or equivalent with grades of Credit or "C" or higher.
This course is a detailed coverage of microcomputer architecture and instruction sets and how to use them to design and write assembly language programs. Topics will cover principles of assembly programming including functions, stacks, recursion, macros, input/output devices, precision arithmetic and logic design.
Transfer Credit: CSU; UC

CIS 240
ISERIES 400 CONTROL LANGUAGE PROGRAMMING 3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: CIS 141 or equivalent with a grade of Credit or "C" or higher is strongly recommended.
This course covers the fundamental concepts required to develop control language programs for use on an IBM iSeries 400. Topics include: structured programming, program control, error handling, OS/400 concepts, and when to use CL programs.
Transfer Credit: CSU

CIS 251
ADVANCED SYSTEMS ANALYSIS AND DESIGN 3 UNITS
Class hours: 3 lecture + 1 hr. lab, arr.
Prerequisite: CIS 201 or equivalent with a grade of Credit or "C" or higher.
This course is a study of theory and application of business data processing systems including the use of administrative tools and techniques. Emphasis is placed on planning practical computer information systems for information retrieval, business applications, operations research, and management control.
Transfer Credit: CSU

CIS 271
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE 1 UNIT
Class hours: 1 hr/week coordination class
Corequisite: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second-, third-, and fourth-semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This may be taken for a maximum of 3 times.
Transfer Credit: CSU

CIS 273
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: 1 hour/week coordination class.
Corequisite: Enrollment in 7 or more units, including Computer and Information Sciences Occupational Work Experience, or at least one other course during summer, in a computer-related major. Three units of Computer and Information Sciences Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 4 times.
Transfer Credit: CSU
CIS 274  
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE  3-4 UNITS
Class hours: 1 hour/week coordination class.  
Corequisite: Enrollment in 7 or more units, including Computer and Information Sciences Occupational Work Experience, or at least one other course during summer, in a computer-related major.  
Four units of Computer and Information Sciences Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.  
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site.  
The aim of the course is to assist students in expanding specific job skills.  
In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.  
First semester students meet with their instructors for a minimum of one hour per week.  
Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths.  
Semester projects that relate to their major and job skills must be completed on the job/training site.  
Second, third, and fourth semester students must secure departmental approval before enrolling.  
Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved.  
These courses may be taken for a maximum of 4 times.

Transfer Credit: CSU; UC

CIS 280  
OBJECT-ORIENTED PROGRAMMING IN C++  3 UNITS
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Strongly recommend CIS 180 or equivalent with a grade of Credit or “C” or higher.  
This is a course in Object-Oriented Programming (OOP) using the C++ programming language.  
Topics presented include abstract data types, objects and classes, operator overloading, inheritance, constructors and destructors, pointers, member functions, virtual functions, the theory of object-oriented programming, and the techniques of object-oriented design.

Transfer Credit: CSU; UC

CIS 281  
WINDOWS PROGRAMMING WITH VISUAL C# .NET  3 UNITS
Class hours: 3 lecture/2 hrs. arr.  
Prerequisite: CIS 180 or CIS 182 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course provides students with the knowledge and skills needed to develop C# applications for the Microsoft.NET platform.  
This course focuses on C# program structure, language syntax, and Windows client application.

Transfer Credit: CSU

CIS 282  
ADVANCED JAVA PROGRAMMING  3.5 UNITS
Class hours: 3 lecture/2 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Strongly recommend CIS 182 or equivalent with a grade of Credit or “C” or higher.  
This course covers the Java Abstract Window Toolkit (AWT).  
Topics will include graphical user interface, graphics, multimedia, system management, networking, security, and database connectivity.

Transfer Credit: CSU

CIS 283A  
JAVA SERVER PAGES (JSP) PROGRAMMING  3.5 UNITS
Class hours: 3 lecture/2 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: CIS 125 or CIS 182 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.  
This course introduces the student to Java Server pages (JSP) programming for Web Server.  
Students learn to write scripts in web pages that are processed at the server to handle client requests, process forms, mine data and connect to other services.

Transfer Credit: CSU

CIS 284  
CGI AND PERL PROGRAMMING  3.5 UNITS
Class hours: 3 lecture/2 lab  
Prerequisite: CIS 180 and CIS 205 or equivalent with grades of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course covers the Common Gateway Interface (CGI) and Perl programming.  
Students learn how CGI works and how to write CGI Perl scripts to generate dynamic Web pages, process forms, search information, and provide informative responses.  
This course is not open to students who have already taken BCIS 94.

Transfer Credit: CSU

CIS 285  
ACTIVE SERVER PAGES PROGRAMMING  3.5 UNITS
Class hours: 3 lecture/2 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: CIS 171 or equivalent with a grade of Credit or “C” or higher.  
This course covers the different approaches for creating server-side scripts using Active Server Pages (ASP).  
The student will learn how to build, implement and execute scripts which create fully-functional Web applications.

Transfer Credit: CSU

CIS 285A  
ASP.NET PROGRAMMING  3.5 UNITS
Class hours: 3 lecture/2 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: CIS 186 and CIS 205 or equivalent with a grade of Credit or “C” or higher.  
This course covers the different approaches for creating server-side scripts using Active Server Pages.NET (ASP).  
The student will learn how to build, implement and execute scripts which create fully-functional web applications.

Transfer Credit: CSU

CIS 292  
DATA STRUCTURES  3 UNITS
Class hours: 3 lecture  
Prerequisite: CIS 182 or CIS 280 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.  
Corequisite: None.  
This course is designed for students in computer science to cover elementary data structures and advanced programming techniques using a modern, object-oriented language.  
Topics include arrays, stacks, queues, linked lists, trees, recursion, sorting, searching, ad advanced applications.

Transfer Credit: CSU; UC

NON-CREDIT (ADULT EDUCATION) CLASSES

AED 90.3 (Not degree applicable)  
SUPERVISED COMPUTER UTILIZATION TUTORIAL  0 UNIT
Class hours: 2 hrs. arr.  
Prerequisite: None.  
Corequisite: Enrollment in any CIS courses.  
Recommendation: None.  
Students must attend two hours minimum per week and are limited to a maximum of six hours per week multiplied by the number of CIS courses in which the students are enrolled.  
(Formerly CIS 2L/CIS 3L)
The emphasis will be understanding the requirements to achieve a cosmetology license. Students will be introduced to technical vocabulary, demonstration of hair design, make-up, chemicals, manicuring, and hands-on applications. An overview of the program and professions will be included. These course hours are not counted toward State Board Certification.

This is an introductory course in the technical and related theory and manipulative skills pertaining to the field of cosmetology. It is designed to acquaint the students with and to develop their ability to perform the basic skills in hair design, hairsculpting, permanent waving, and people skills. Emphasis will be placed on the Cosmetology Act, State Board Rules and Regulations, as well as safety, nail tips and wraps, sanitation, and chemistry as they relate to cosmetology profession.

This course is designed to permit the student to complete 1600 hours necessary to take the State Board of Cosmetology examination. It provides an opportunity for the student to continue developing manipulative skills in hair styling, hair coloring, permanent waving, chemical straightening, scalp treatments, facials, waxing, manicuring, pedicures, and thermal styling. This course may be taken a maximum of 4 times.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

Announcement of Courses

COSMETOLOGY
(Science Division)

COSMETOLOGY I 6.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 50A or COS 60B or COS 70A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 50A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 50B or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 50C or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

INTERMEDIATE

COSMETOLOGY II 6.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 50A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an intermediate course in theory as it pertains to cosmetology. Students continue to develop manipulative skills in makeup, electric facial, facial waxing, arching, haircoloring, lightener, color weaves, chemical restructuring, soft perm and conditioning to gain knowledge of tricology and chemistry, as they relate to cosmetology. Emphasis is placed on professionalism and client relationships.

COSMETOLOGY III 6.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 51A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an intermediate course in theory as it pertains to cosmetology. Students continue to develop manipulative skills in air forming, wet hairstyling, chemical waving, hairsculpting, salesmanship, long hairstyling, chemical relaxing, conditioning, and to gain knowledge of tricology and chemistry, as they relate to cosmetology. Emphasis is placed on professionalism and client relationships.

COSMETOLOGY IV 6.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 51A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an intermediate course in theory as it pertains to cosmetology. Students continue to develop manipulative skills in facial waxing, acrylic nails, acrylic overlays, hair augmentation and to gain knowledge.
of trichology, dermatology, electricity, hair color, chemistry, health and safety, as they relate to cosmetology. Emphasis is placed on professionalism and client relationships.

**COS 52A**
**ADVANCED COSMETOLOGY I** 6.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 51C or COS 61B or COS 70B or COS 72B or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an advanced course in theory as it pertains to cosmetology. Students continue to develop manipulative skills in thermal hairstyling, competition styling, hair sculpturing, conditioning, reconstruction, chemical waving, chemical straightening, skin care, European facials, and manicuring. Emphasis is placed on professionalism, client relationships, people skills, salon management, and State Board examination preparation.

**COS 52B**
**ADVANCED COSMETOLOGY II** 6.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 52A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an advanced course in theory as it pertains to cosmetology. Students continue to develop manipulative skills in thermal hairstyling, competition styling, hair sculpturing, conditioning, reconstruction, chemical waving and chemical straightening and hair coloring. Emphasis is placed on professionalism, client relationships and State Board examination preparation.

**COS 52C**
**ADVANCED COSMETOLOGY III** 6.5 UNITS
Class hours: 9.75/29.25 lab
Prerequisite: COS 52B or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an advanced course in theory as it pertains to cosmetology. Students continue to develop manipulative skills in thermal hairstyling, styling, hair sculpturing, conditioning, reconstruction, chemical waving, chemical straightening, make-up, skin care, European facials, light therapy, skin diseases, skin disorders, acrylic nails and artificial nail tips nail wraps. Emphasis is placed on health and safety, professionalism, client relationships and State Board examination preparation.

**COS 53**
**ADVANCED COSMETOLOGY MANIPULATION** 6.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 52C or COS 62B or COS 70C or COS 73B with a grade of Credit or “C” or higher.
This is an advanced course designed to permit the student to complete 1600 hours necessary to take the State Board of Cosmetology examination. It provides an opportunity for the student to continue developing manipulative skills in hairstyling, hair coloring, permanent waving, chemical straightening, scalp treatments, facials, waxing, manicuring, pedicuring, and thermal styling. This course may be taken a maximum of 3 times as necessary to complete 1600 hours.

**COS 54**
**INTRODUCTORY ESTHETICIAN** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: Limitation on enrollment: Completion of 10th grade or equivalent.
Corequisite: None.
This is an introductory course designed to develop basic skills and theoretical knowledge necessary to enter the licensed esthetician vocation. Students develop knowledge in theories of cosmetic chemistry, products, and their use and effect on skin. Students’ knowledge and ability are achieved in a minimum of 300 hours, through lecture, demonstrations and laboratory in a salon atmosphere.

**COS 54A**
**ADVANCED ESTHETICIAN** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 54 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This class is an advanced portion of the esthetic program. It develops skills in electrical modalities, depilatory waxing, paraffin waxing, advanced massage techniques, and corrective make-up. Students develop skills in selecting appropriate facial treatments. The students’ ability and knowledge are to be achieved in a minimum of 300 hours through lecture and demonstration by working in a salon atmosphere.

**COS 54B**
**ADVANCED COSMETOLOGY** 6.5 UNITS
Class hours: 9.75 lecture/29.25 lab
Prerequisite: COS 54A or equivalent with a grade of Credit or “C” or higher.
This is an introductory course designed to permit the student to complete 1600 hours necessary to take the State Board of Cosmetology examination. It provides an opportunity for the student to continue developing manipulative skills in hairstyling, hair coloring, permanent waving, and thermal styling. This course may be taken a maximum of 3 times as necessary to complete 1600 hours.

**COS 60A**
**INTRODUCTORY COSMETOLOGY I** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 20 with a grade of Credit or “C” or higher, and satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Credit or “C” or higher.
Limitation on enrollment: 10th grade education or equivalent.
This is an introductory course in the technical and related theory and manipulative skills pertaining to the field of cosmetology. It is designed to acquaint the student with, and to develop their ability to perform the basic skills in hairstyling, hairsculpturing, haircoloring, permanent waving, and manicuring. Emphasis will be placed on the Cosmetology Act, State Board Rules and Regulations, safety, sanitation, anatomy, and chemistry as they relate to the cosmetology profession.

**COS 60B**
**INTRODUCTORY COSMETOLOGY II** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 60A or COS 71A with a grade of Credit or “C” or higher.
This is an introductory course in the technical and related theory and manipulative skills pertaining to the field of cosmetology. It provides an opportunity for the student to perform basic skills in chemical relaxer, soft perms, press and curl, facials and people skills. It provides an opportunity for the student to continue developing manipulative skill in hairstyling, hairsculpturing, haircoloring, permanent waving, manicuring and pedicuring. Emphasis will be placed on the safety and sanitation as it relates to the cosmetology profession, professionalism and client relationships.

**COS 61A**
**INTERMEDIATE COSMETOLOGY I** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 50C or COS 60A or COS 70A or COS 71B with a grade of Credit or “C” or higher.
This is an intermediate course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in thermal hairstyling, wet hairstyling, chemical waving, hairsculpturing, salesmanship, long hairstyling, chemical relaxing, make-up, conditioning, manicuring, and to gain knowledge of trichology, dermatology, and chemistry, as they relate to cosmetology. People skills, press and curl, hair design, and men’s hairstyling will also be studied. Emphasis is placed on professionalism and client relationships.

**COS 61B**
**INTERMEDIATE COSMETOLOGY II** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 61A or COS 72A with a grade of Credit or “C” or higher.

---

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This is an intermediate course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing people skills, manipulative skills in haircolor, manicuring, scalp treatments, chemical waving, hairsculpturing, and chemistry, hairdressing, permanent wave, press and curl, and chemical relaxing. Emphasis is placed on professionalism, client relationships, and people skills.

COS 62A
ADVANCED COSMETOLOGY I 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 51C or COS 61B or COS 70B or COS 72B with a grade of Credit or “C” or higher.
This is an advanced course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, thermal hairstyling, competition styling, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation.

COS 62B
ADVANCED COSMETOLOGY II 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 62A or COS 73A with a grade of Credit or “C” or higher.
This is an advanced course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, thermal hairstyling, competition styling, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation.

COS 70A
INTRODUCTORY COSMETOLOGY 8 UNITS
Class hours: 9.38 lecture/28.13 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 20 with a grade of Credit or “C” or higher, and satisfactory completion of the Reading Process or READ 43 or equivalent with a grade of Credit or “C” or higher.
Limitation on enrollment: 10th grade education or equivalent.
Corequisite: None.
Recommendation: None.
This is an introductory course in the technical and related theory and manipulative skills pertaining to the field of cosmetology. It provides an opportunity for students to perform basic skills in chemical relaxer, soft perms, press and curl, facials, and people skills. Emphasis will be placed on the safety and sanitation as it relates to the cosmetology profession.

COS 70B
INTERMEDIATE COSMETOLOGY 8 UNITS
Class hours: 9.38 lecture/28.13 lab
Prerequisite: COS 50C or COS 60B or COS 70A or COS 71B with a grade of Credit or “C” or higher.
This is an intermediate course in technical and related theory as it pertains to cosmetology. It provides an opportunity for the student to consider developing manipulative skills in hair coloring, thermal hairstyling, chemical waving, chemical straightening, facials, make-up, manicuring. Emphasis is placed on professionalism and personal/client relationships.

COS 70C
ADVANCED COSMETOLOGY MANIPULATION 8 UNITS
Class hours: 9.38 lecture/28.13 lab
Prerequisite: COS 51C or COS 61B or COS 70B or COS 72B with a grade of Credit or “C” or higher.
This is a course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skill in haircoloring, thermal hairstyling, competition styling, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation. This course may be taken a maximum of 2 times as necessary to complete 1600 hours.
relationships. (Formerly COS 71B)

**COS 72B**
**INTERMEDIATE COSMETOLOGY II** 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: COS 61A or COS 72A with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an intermediate course in theory as it pertains to cosmetology. It provides an opportunity for students to continue developing manipulative skills in thermal hairstyling, wet hairstyling, wet hairstyling, chemical waving, hairsculpturing, salesmanship, long hairstyling, chemical relaxing, and braiding to gain knowledge of tricology and chemistry, as they relate to cosmetology. People skills, press and curl, hair design, and men’s hairstyling will also be studied. Emphasis is placed on professionalism and client relationships.

**COS 73A**
**ADVANCED COSMETOLOGY I** 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: COS 51C or COS 61B or COS 70B or COS 72B with a grade of Credit or “C” or higher.
This is a course in theory as it pertains to cosmetology. It provides an opportunity for the student to continue developing manipulative skills in haircoloring, thermal hairstyling, competition styling, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation. This course may be taken a maximum of 2 times as necessary to complete 1600 hours. (Formerly COS 71C)

**COS 73B**
**ADVANCED COSMETOLOGY II** 4 UNITS
Class hours: 4.5 lecture/13.5 lab
Prerequisite: COS 62A or COS 73A with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is an advanced course in theory as it pertains to cosmetology. It provides an opportunity for students to continue developing manipulative skills in haircoloring, thermal hairstyling, competition styling, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships, and State Board examination preparation.

**COS 80A**
**INSTRUCTION TECHNIQUES IN COSMETOLOGY I** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: A valid Cosmetology license and five years verified work experience.
Corequisite: None.
Recommendation: None.
This course is the first of two sequenced courses designed to prepare the licensed cosmetologist for the cosmetology instructor examination as required by the Board of Barbering and Cosmetology. Content includes demonstrations on teaching with the student participating in both lectures of related information and practical demonstration of topics that are required for State Board licensure.

**COS 80B**
**INSTRUCTION TECHNIQUES IN COSMETOLOGY II** 10 UNITS
Class hours: 5 lecture/15 lab
Prerequisite: COS 80A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This advanced course is designed to continue the preparation of the licensed cosmetologist for the cosmetology instructor examination as required by the Board of Barbering and Cosmetology. The lecture section consists of continued and more advanced demonstrations in teaching with the student participating in both lectures of related information and practical demonstration of students that are required for State Board licensure.

**Counseling and Guidance**
(Counseling Division)

**CG 1**
**(Not degree applicable)**
**CAREER PLANNING** 1 UNIT
Class hours: 2 hours per week
Prerequisite: None.
This course is designed to help the student approach career decisions in a systematic way. A variety of techniques are used to assess individual characteristics and relate these to occupational information. At times, sections may be offered which emphasize particular types of situations such as the person making initial career decisions, mid-life career changes, and minority programs.

**CG 2**
**(Not degree applicable)**
**SELF AWARENESS TOWARDS EDUCATIONAL READINESS** 2 UNITS
Class hours: 2 lecture/3.3 lab
Prerequisite: None.
This course is designed to explore the various
CG 50
ORIENTATION AND EDUCATIONAL PLANNING 0.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to introduce students to services offered at Cerritos College; the history and mission of the system of post-secondary education system in California; policies and procedures which affect students at Cerritos College; educational planning, including major and general education requirements, course sequencing, and transfer requirements for the California State University and University of California systems. As part of the course, students will tour the Cerritos College campus, acquainting themselves with the location and function of various offices and service providers. Each student will produce an educational plan specific to her or his educational goal. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 2 times.

CG 100
COUNSELOR AIDE IN THE COMMUNITY COLLEGE 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
This course is designed to familiarize the student with the functions and training in the techniques of the student counselor aide in a community college setting.
Transfer Credit: CSU

CG 150
DYNAMICS OF LEADERSHIP 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or better and participation in a college or community-based organization or club.
This course is designed for students who wish to develop a deeper understanding and appreciation of the theories, principles, and techniques of leadership in a college or community-based organization. It includes the study and practical application of group and individual leadership techniques. It is designed to improve awareness of group dynamics, listening skills, personal values, decision making, problem solving, and organizational development. It emphasizes critical analysis of leaders in the news, history, film, and/or literature.
Transfer Credit: CSU

CG 200
SUCCESS IN COLLEGE AND CAREER 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will provide students with knowledge, information, and skills to better understand themselves as students, people, and members of the working world. It will assist them to establish life, career, educational, and personal goals and to develop plans and strategies to successfully meet those goals.
Transfer Credit: CSU

CG 210
JOB SEARCH STRATEGIES 1 UNIT
Class hours: 2 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Completion or near completion of a degree program or certificate program or be actively seeking a new employment opportunity.
This is an open entry/open exit, self-paced course designed to prepare students to manage their transition from college-to-work and/or work-to-work situations. Students will learn the fundamentals of the job search process. Students will learn to develop job search strategies, prepare print and electronic resumes and improve their interview skills. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

CG 220
TRANSITION TO UNIVERSITIES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher. Completion of 12 CSU/UC transferable units.
This course is a presentation and discussion of college life transitions. It addresses effective decision-making activities and strategies for transfer students. Included are evaluation of education/career goals; analysis, comparison, and evaluation of university admissions standards; review of major preparation; and an introduction to post-graduate entrance requirements. Students will make on-site research/field visits to universities and review available student services.
Transfer Credit: CSU

COURT REPORTING

See BUSC

(Business Court Reporting/Computerized Shorthand)

CULINARY ARTS

(Health Occupations Division)

CA 15
CERTIFICATION FOR FOOD HANDLERS 0.5 UNIT
Class hours: 9 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers the principles of food handling. It is a National Restaurant Association ServSafe course and meets current requirements established by regulatory agencies for a certified food handler. This course is offered on a credit/no credit basis only.

CA 43/44 (Not degree applicable)

OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Culinary Arts work experience 43 or 20 hours of employment per week for Culinary Arts work experience 44. The employment must be in a job related to the student's educational goal.
Prerequisite: None.
Corequisite: (1) Enrollment in the Culinary Arts vocational program with 7 or more units including occupational work experience.
Occupational Work Experience is a supervised employment program in an approved work station related to the student's declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or an expansion of their regular responsibilities. This course may be repeated for a maximum of 2 times based on the number of hours on the job.

CA 52
FOOD PRODUCTION 9.5 UNITS
Class hours: 3 lecture/20 lab
Prerequisite: None.
Corequisite: CA 101 with a grade of Credit or "C" or higher or prior completion.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course introduces the beginning student to food products and ingredients and develops basic cooking skills used in commercial kitchens. The preparation and uses of meats, vegetables, fruits, salads, sandwiches, garnishes, dressing, grilling, deep-fat frying, pan frying, and broiling are included. A negative T.B. test for food service personnel is a State regulation.

CA 53
COMMERCIAL FOOD PRODUCTION: PANTRY ITEMS 9.5 UNITS
Class hours: 3 lecture/20 lab
Prerequisite: CA 52 and CA 101 or equivalent with grades of Credit or “C” or higher.
This is a basic course in fundamentals of hotel and restaurant dinner cooking and methods of preparing special pantry items. Lecture/demonstrations and practical experience in varied methods of cooking techniques are an essential part of this course.

CA 54
COMMERCIAL FOOD PRODUCTION: MEATS & POULTRY 9.5 UNITS
Class hours: 3 lecture/20 lab
Prerequisite: CA 53 or equivalent with a grade of Credit or “C” or higher.
This course is designed to familiarize the student with the principles and procedures of hotel restaurant butchering, meat purchasing, and the carving of meats and poultry. Includes lecture/demonstration and practical experience in carving procedures, trimming, boning, rolling, tying, and cutting of steaks and chops.

CA 60
FOODS PURCHASE AND CONTROL 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to familiarize the student with all aspects of purchasing and cost control within the foodservice industry. Instruction and experience in the areas of forecasting operational needs, menu pricing, food purchasing, and cost control are included.

CA 80
INTRODUCTION TO BAKING SKILLS 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: None.
Corequisite: CA 101 with a grade of Credit or “C” or higher or prior completion.
This course introduces the student to basic baking techniques and basic ingredients utilized in the industry. This course will cover developing a variety of breads, sweet doughs, roll varieties, pie dough and fillings, cakes and pastries. A negative T.B. test for food service personnel is a State regulation.

CA 81
PROFESSIONAL BAKING AND PASTRY PRODUCTION I 5 UNITS
Class hours: 3 lecture/7 lab
Prerequisite: CA 80 and CA 101 or equivalent with grades of Credit or “C” or higher.
This course introduces the student to the baking industry, baked products, and ingredients. The student will develop basic skills utilized in professional bakeries. Demonstrations and practical experiences in the preparation and use of doughs, pastries and creams, adjusting standard recipes, and interpretive use of weights and measures are included. A negative T.B. test for food service personnel is a State regulation.

CA 82
PROFESSIONAL BAKING AND PASTRY PRODUCTION II 5 UNITS
Class hours: 3 lecture/7 lab
Prerequisite: CA 81 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This advanced baking course provides the opportunity to increase skills in producing a more uniform product, with high eye appeal, and improved taste and structure. These products include cake, pastries, icings, and fillings. Processed frozen dough, fried products, and frozen baked products and introduced. Maintaining product freshness is emphasized. A negative T.B. test for food service personnel is a State regulation.

CA 101
INTRODUCTION TO FOOD SERVICE, SAFETY & SANITATION 1 UNITS
Class hours: 1 lecture
Prerequisite: None.
This course covers the principles of food microbiology, important foodborne diseases, standards that are enforced by regulatory agencies, and applied measures for the prevention of foodborne diseases and other microbiological problems. This course meets current food protection standards for regulatory agents. ServSafe Certification Exam will be administered.
Transfer Credit: CSU

CA 120
INTRODUCTION TO HOSPITALITY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.

DANGEL ASSISTING
(Health Occupations Division)

DA 1 (Not degree applicable)
DENTAL RADIATION SAFETY LICENSING 1.5 UNITS
Class hours: 4 lecture/5 lab
Prerequisite: Verification of a minimum of 480 hours of work experience as a dental assistant.
Corequisite: None.
Recommendation: None.
This course prepares the working dental assistant with theories and techniques of intra-oral and extra-oral radiography including application to a variety of patients. Upon satisfactory completion of this course, the student will receive a California Radiation License. This course may be taken a maximum of 2 times. This course is offered on a credit/no credit basis only.

DA 51
APPLIED DENTAL SCIENCE I 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
This course is an introduction to the application of basic dental sciences and infection control. It includes dental terminology, microbiology, anatomy of the head and neck, oral physiology, tooth morphology, preliminary oral examination, taking impressions for study models, pouring models, and bleaching techniques. It also includes procedures in managing asepsis, infection and hazard control consisting of maintenance, disinfection and sterilization of equipment, supplies, and disposal of hazardous waste pertaining to patient care.

DA 52
DENTAL RADIOGRAPHY I 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course is a study of the dental x-ray, the characteristics and methods of controlling x-radiation, types of film used, methods of processing, identifying, and mounting radiographs, radiation safety procedures, interpretation of radiographs, and an analysis of technique errors. It includes modern intra-oral dental and extra-oral radiographic techniques.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

DA 53
INTRODUCTION TO CHAIRSIDE ASSISTING 3 UNITS
Class hours: 2 lecture, 3 lab
Prerequisite: None.
Corequisite: DA 54.
This course involves instruction in the role and responsibilities of the chairside assistant. It includes basic qualifications, preparing patient for treatment, taking of a health history, charting, terminology, positioning of patient-operator-auxiliary for four-handed dental procedures, assisting with administration of local anesthetic agents, placement of a rubber dam, instrument exchange, oral evacuation, retraction, illumination, and assisting with endodontic procedures. Cardiopulmonary resuscitation is included as part of the course content.

DA 54
INTRODUCTION TO OPERATIVE PROCEDURES 4 UNITS
Class hours: 2 lecture, 6 lab
Prerequisite: None.
Corequisite: DA 53.
This course includes manikin instruction in the techniques, materials, and instrumentation for assisting in operative dental procedures such as amalgam and composite restorations, gold inlays and crowns, and fixed bridges. An introduction to intra-oral tasks delegated to registered dental assistants which are related to operative dentistry, such as matrix placement, placement of bases and liners, placement of plastic temporary restorations, and removal of excess cement is also provided.

DA 61
APPLIED DENTAL SCIENCE II 3 UNITS
Class hours: 2 lecture, 3 lab
Prerequisite: DA 51 or equivalent with a grade of Credit or “C” or higher.
Corequisite: DA 63.
This course includes a study of oral pathology, nitrous oxide, pharmacology and the influences of dental medicines on the body systems. Post-injection complications and medical emergencies are included. Emphasis is also placed on preventive dentistry with instruction in four preventive measures: use of fluorides, regular dental examinations, daily practice of effective oral hygiene, good nutrition, and control of food habits. Instruction and supervision of a plaque control program will be achieved through clinical experience with focus on the identification of calculus, plaque, and stains, applying disclosing agents, and polishing exposed surfaces of the teeth. The student will also develop and implement a community dental health project.

DA 62
DENTAL RADIOGRAPHY II 2 UNITS
Class hours: 1 lecture, 3 lab
Prerequisite: DA 52 or equivalent with a grade of Credit or “C” or higher.
The student will be instructed in advance techniques of dental radiography, anatomical landmarks and dental anatomy pertaining to dental radiography with emphasis placed on evaluation of films. The student will practice taking full mouth radiographs for diagnosis by a dentist. Operation of panoramic equipment will also be included.

DA 63
ADVANCED CHAIRSIDE ASSISTING 4 UNITS
Class hours: 2 lecture, 6 lab
Prerequisite: DA 53 and DA 54 or equivalent with grades of Credit or “C” or higher.
Corequisite: DA 65.
This course includes instruction in the specialties of dentistry and armamentarium required in each specialty. Laboratory content includes development of preclinical skills in the extended functions which are required for the Registered Dental Assistant.

DA 64
DENTAL OFFICE MANAGEMENT 2 UNITS
Class hours: 1 lecture, 3 lab
Prerequisite: DA 51 or equivalent with a grade of Credit or “C” or higher.
The course includes instruction in the non-clinical functions which are integral to the dental office. Subject areas include office communications, scheduling appointments, making financial arrangements, recall, completing insurance forms, record keeping, inventory, bookkeeping, marketing strategies, the use of computers, and other related skills required of a secretarial dental assistant.

DENTAL HYGIENE
(Health Occupations Division)

DH 110
PREVENTIVE DENTISTRY I 2 UNITS
Class hours: 2 lecture
Prerequisite: Admission to the Dental Hygiene Program.
Corequisite: None.
Recommendation None.
This course introduces the student to the concept of optimum oral health care through plaque control, preventive dentistry and the role of the auxiliaries on the dental health team. Emphasis is placed on oral hygiene practices and patient motivation. Also included are etiology of soft and hard deposits, and patient instruction in plaque control care.

DH 111
INFECTION CONTROL AND DENTAL OFFICE EMERGENCIES 2 UNITS
Class hours: 2 lecture
Prerequisite: Acceptance into Dental Hygiene Program.
Corequisite: DH 115C.
This course covers the basic principles of infection control and the application of "universal precautions" in the dental health care setting. Included in this course is the selection and use of procedures and products to prevent the spread of infectious diseases in the practice of dental hygiene. Specific step-
### Announcement of Courses

by-step procedures and current regulatory mandates related to infection control and the management of hazardous materials will be covered in detail. In addition, knowledge and skills related to preparedness for the prevention of medical emergencies in the dental setting will be covered.

*Transfer Credit: CSU*

#### DH 112
**DENTAL HYGIENE RADIOGRAPHY** 2 UNITS
- Class hours: 1 lecture/3 lab
- Prerequisite: Admission to the Dental Hygiene Program.
- Corequisite: None.
- This course is a study of the dental radiography, the characteristics and methods of controlling x-radiation, types of film used, methods of processing, identifying, and mounting radiographs, radiation safety procedures, and interpretation of radiographs for preliminary evaluation. It includes the theories and techniques of intra-oral and extra-oral radiography with laboratory experience and analysis of technique errors.

*Transfer Credit: CSU*

#### DH 114
**DENTAL HYGIENE CLINICAL SCIENCES I** 2 UNITS
- Class hours: 2 lecture
- Prerequisite: Admission to the Dental Hygiene Program.
- Corequisite: DH 115C.
- This course introduces the student to the methodology and rationale for patient assessment and data collection. It includes patient histories, determination of vital signs, extraoral and intraoral examination, examination of the gingival and periodontal tissues, examination of the teeth and appropriate documentation of the data. The student will receive essential information for assessment of a patient prior to the formulation of the dental hygiene treatment service plan.

*Transfer Credit: CSU*

#### DH 115C
**PRE-CLINICAL DENTAL HYGIENE I** 2 UNITS
- Class hours: 6 lab
- Prerequisite: Admission to the Dental Hygiene Program and a valid adult, child and infant CPR card including two-person CPR.
- Corequisite: DH 114.
- This course provides the student with the pre-clinical and clinical experience designed to develop thorough and efficient dental instrumentation techniques for comprehensive oral hygiene services.

*Transfer Credit: CSU*

#### DH 116
**HEAD AND NECK ANATOMY** 2 UNITS
- Class hours: 2 lecture/1 lab
- Prerequisite: Admission to the Dental Hygiene Program.
- Corequisite: DH 119.
- This course is a detailed study of the anatomy and physiology of the human head and neck. Emphasis is placed on the correlation of structure and function especially where applicable to clinical dental hygiene.

*Transfer Credit: CSU*

#### DH 119
**DENTAL EMBRYOLOGY, HISTOLOGY, AND ANATOMY** 2 UNITS
- Class hours: 2 lecture/1 lab
- Prerequisite: Admission to the Dental Hygiene Program.
- Corequisite: DH 115C and DH 116.
- Recommendation: None.
- This course covers an introduction to orofacial structures and the study of orofacial embryology, oral histology, and dental anatomy. Clinical considerations relevant to dental hygiene practice and root morphology to enhance instrumentation are included.

*Transfer Credit: CSU*

#### DH 120
**PREVENTIVE DENTISTRY II** 2 UNITS
- Class hours: 2 lecture
- Prerequisite: DH 114 and HO 152 or equivalent with grades of Credit or “C” or higher.
- Corequisite: DH 125.
- Recommendation: DH 110 or equivalent with a grade of Credit or “C” or higher.
- This course offers clinical information in the areas of patient motivation for plaque control, including periodontal disease, and dietary analysis. Techniques in nutritional counseling for the dental patient will be emphasized.

*Transfer Credit: CSU*

#### DH 125
**DENTAL HYGIENE CLINICAL SCIENCES II** 2 UNITS
- Class hours: 2 lecture/1 lab
- Prerequisite: DH 114 and DH 115C or equivalent with a grade of Credit or “C” or higher.
- Corequisite: DH 125.
- This course is designed to support Clinical Dental Hygiene II. It is extended to allow for weekly discussions pertinent to clinical skills and related subjects which can be applied in the dental clinic setting. An overview of the technique and procedures particular to each dental specialty is presented. Dental clinic policies and procedures for clinic operation will be emphasized.

*Transfer Credit: CSU*

#### DH 125C
**CLINICAL DENTAL HYGIENE II** 3 UNITS
- Class hours: 9 lab/clinic
- Prerequisite: DH 115C or equivalent with a grade of Credit or “C” or higher.
- Corequisite: DH 125.
- This course provides the student with clinical experiences in the practical application of dental procedures to perform comprehensive oral hygiene services. Students are scheduled at off campus dental clinics with supervision from the Cerritos College Dental Hygiene Faculty and will have the opportunity to observe the various dental specialties at the UCLA School of Dentistry.

*Transfer Credit: CSU*

#### DH 126
**GENERAL AND ORAL PATHOLOGY** 2 UNITS
- Class hours: 3 lecture/lab
- Prerequisite: DH 112, DH 116 and DH 119 or equivalent with grades of Credit or “C” or higher.
- Corequisite: DH 125C.
- This course includes an in-depth study of the principles of general pathology and the specifics of oral pathology. Emphasis is placed on the clinical recognition, differential diagnosis, and treatment of oral pathologic conditions and associated systemic disorders.

*Transfer Credit: CSU*

#### DH 127
**PHARMACOLOGY** 2 UNITS
- Class hours: 2 lecture
- Prerequisite: DH 115C, DH 116, and DH 119 or equivalent with grades of Credit or “C” or higher.
- Corequisite: DH 125C and DH 128.
- This course covers the general principles of pharmacology, use of therapeutic agents utilized in dental practice, an overview of medically prescribed drugs used by dental patients and a background of contemporary pharmacologic issues which concern the consumer.

*Transfer Credit: CSU*

#### DH 128
**MANAGEMENT OF PAIN** 2 UNITS
- Class hours: 1 lecture/3 lab
- Prerequisite: DH 116 or equivalent with a grade of Credit or “C” or higher.
- Corequisite: DH 125C and DH 127.
- This course is designed to teach the student

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
management of pain control through the use of local anesthetic agents and the administration of nitrous oxide and oxygen when used as a sedative. The physiology and pharmacology of these agents, indications and contra-indications for use, and the treatment of complications and emergencies are stressed. Other modalities of pain control will be discussed.

Transfer Credit: CSU

**DH 129**

**APPLIED PERIODONTICS** 2 UNITS

Class hours: 2 lecture
Prerequisite: DH 114 or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 125G.
This course is designed to provide the student with a thorough understanding of the role of the hygienist in the treatment of periodontal disease. The normal periodontium, the pathogenesis of periodontal disease, etiology, and therapy are studied in detail. Soft tissue curvette and root planing are emphasized.

Transfer Credit: CSU

**DH 150C**

**CLINICAL DENTAL HYGIENE IIA** 1 UNIT

Class hours: 3 lab
Prerequisite: DH 125C & DH 128 or equivalent with a grade of Credit or "C" or higher.
This course provides the student with clinical experiences in the delivery of dental services on patients, utilizing instructor assisted guided discovery learning methodology. Students are scheduled at select contract dental facilities.

Transfer Credit: CSU

**DH 232L**

**DENTAL MATERIALS LABORATORY** 1 UNIT

Class hours: 3 lab
Prerequisite: None.
Corequisite: DH 235C.
This course emphasizes the reasons specific dental materials are employed and the ways in which they react to the oral environment. Biological considerations in the selection and utilization of various dental materials are stressed. The course is designed to provide the dental hygiene student with an understanding of laboratory techniques and chairside procedures commonly encountered in dentistry.

Transfer Credit: CSU

**DH 234**

**DENTAL CARE FOR THE SPECIAL PATIENT** 2 UNITS

Class hours: 2 lecture
Prerequisite: DH 125C and DH 127 or equivalent with grades of Credit or "C" or higher.
Corequisite: DH 235C.
This introductory course for dental hygiene care of the medically compromised and older adult patient covers basic information on disease entities which cause disabilities and are common in the older person. Emphasis will be on recognition of medical precautions, medications which affect oral health, barriers and access to oral health care, and prevention and treatment of oral diseases.

Transfer Credit: CSU

**DH 235**

**DENTAL HYGIENE CLINICAL SCIENCES III** 2 UNITS

Class hours: 2 lecture
Prerequisite: DH 125C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 235C.
This course is designed to support Clinical Dental Hygiene III. It is intended to allow for further studies in advanced periodontal treatment.

Transfer Credit: CSU

**DH 235C**

**CLINICAL DENTAL HYGIENE III** 4 UNITS

Class hours: 12 lab/clinic
Prerequisite: DH 125C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 235C.
This course is designed to provide the student with the continuation of clinical experiences in performing comprehensive dental hygiene services. Students are scheduled at a variety of dental facilities in Los Angeles County. Under the supervision of the Cerritos College Dental Hygiene faculty, the student will perform traditional dental hygiene functions increasing in complexity through the sequence of clinical courses.

Transfer Credit: CSU

**DH 238**

**COMMUNITY DENTAL HEALTH LABORATORY I** 1 UNIT

Class hours: 3 lab
Prerequisite: DH 110 or equivalent with a grade of Credit or "C" or higher.
This course provides a basic introduction to the principles of health education, including discussion of the teaching/learning process, and effective pedagogy for the diverse population of elementary school-aged child. Application of principles learned will be applied in the delivery of dental health education to elementary school children in the community. Students will prepare lesson plans, behavioral objectives, and visual media to be used in presenting subject matter to the children.

Transfer Credit: CSU

**DH 239**

**DENTAL HEALTH EDUCATION AND RESEARCH I** 2 UNITS

Class hours: 2 lecture
Prerequisite: Admission to the Dental Hygiene Program.
Corequisite: None.
This course provides an introduction to research methodology and biostatistics. Emphasis will be placed on reading and interpreting scientific literature and using technology in searching for and developing a scientific table clinic suitable for presentation in the dental community.

Transfer Credit: CSU

**DH 244**

**ETHICAL ISSUES IN DENTAL HYGIENE** 2 UNITS

Class hours: 2 lecture
Prerequisite: DH 235C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 245C.
This course investigates ethical issues, dilemmas, and the State Dental Practice Act that affect the standards of behavior for the dental hygienist. Principles of general and biomedical ethics are applied to common examples of situations faced by dentists and hygienists in today's dental practice.

Transfer Credit: CSU

**DH 245**

**DENTAL HYGIENE CLINICAL SCIENCES IV** 2 UNITS

Class hours: 2 lecture
Prerequisite: DH 235C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 245C.
This course is designed to support Clinical Dental Hygiene IV and prepare the students for the National Board Dental Hygiene Examination. Current dental treatment philosophies and technological advances in dentistry are presented through case-base problem simulations. In addition, the subject of myofunctional evaluation and therapeutic treatment modalities will be introduced.

Transfer Credit: CSU

**DH 245C**

**CLINICAL DENTAL HYGIENE IV** 4 UNITS

Class hours: 12 lab/clinic
Prerequisite: DH 235C or equivalent with a grade of Credit or "C" or higher.
Corequisite: DH 245.
This course is designed to provide the student with the continuation of clinical experiences in performing comprehensive dental hygiene services to patients with complex periodontal problems. Increased opportunities are experienced at multiculturaly diverse
Community settings. With supervision from the Cerritos College Dental Hygiene faculty, the student will perform traditional dental hygiene functions to a greater number of patients with increased efficiency and complexity and will provide services in a geriatric nursing home. Transfer Credit: CSU

**DH 248L**

**COMMUNITY DENTAL HEALTH LABORATORY II**

*1 UNIT*

Class hours: 3 lab
Prerequisite: DH 238 and DH 239 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
This course is designed to provide the student with an opportunity to deliver dental health education to a variety of age groups in the community. Emphasis will be on student knowledge and initiative in the design, implementation, and evaluation of a dental health program of his/her choice for an adult group in the community. Additionally, table clinics on a current dental topic of interest will be presented in the community.
Transfer Credit: CSU

**DH 249**

**DENTAL HEALTH EDUCATION AND RESEARCH II**

*2 UNITS*

Class hours: 2 lecture
Prerequisite: DH 238L or equivalent with a grade of Credit or “C” or higher.
Corequisite: DH 248L.
This course introduces basic concepts of dental public health including oral epidemiology, health care delivery and related research. Teaching/learning philosophies and strategies appropriate for dental health education of diverse adult populations are stressed.
Transfer Credit: CSU

**DIRECTED STUDIES**

Directed Studies in any combination may be taken for a maximum of 6 units.

**DIRECTED STUDIES 98**

*1 UNIT*

Class hours: 3 lab
Prerequisite: A previous college course in the discipline.
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours, 2 units for 108 hours). This course may be taken a maximum of 2 times.

**DIRECTED STUDIES 99**

*2 UNITS*

Class hours: 6 lab
Prerequisite: A previous college course in the discipline.
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours, 2 units for 108 hours). This course may be taken a maximum of 2 times.

**DIRECTED STUDIES 298**

*1 UNIT*

Class hours: 3 lab
Prerequisite: A previous college course in the discipline.
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours, 2 units for 108 hours). This course may be taken a maximum of 2 times. For selected disciplines, UC transfer credit may be possible after admission to a UC campus, pending review of appropriate course materials by UC staff. See a counselor for an explanation.
Transfer Credit: CSU

**DIRECTED STUDIES 299**

*2 UNITS*

Class hours: 6 lab
Prerequisite: A previous college course in the discipline.
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department. With the guidance of the faculty member, students prepare and carry out a written learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member one to two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours, 2 units for 108 hours). This course may be taken a maximum of 2 times. For selected disciplines, UC transfer credit may be possible after admission to a UC campus, pending review of appropriate course materials by UC staff. See a counselor for an explanation.
Transfer Credit: CSU

**ESCI 101**

**PHYSICAL ECOLOGY**

*3 UNITS*

Class hours: 2.5 hours lecture, and the equivalent of three one day field trips.
Prerequisite: None.
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Credit or “C” higher.
This course is a general studies course including problems of current concern relative to hydrologic, oceanographic and atmospheric processes as they affect and are affected by man’s activities. The technologic, economic, and political aspects of pollution and solutions to environmental problems are studied.
Transfer Credit: CSU; UC

**ESCI 101L**

**FIELD LABORATORY**

*1 UNIT*

Class hours: 3 lab
Prerequisite: Concurrent enrollment in ESCI 101 or prior completion of ESCI 101 or equivalent with a grade of Credit or “C” or higher.
This is a general studies course offering an opportunity for a more complete understanding of environmental problems discussed in Earth Science 101. It includes a hands-on approach to understanding the processes and materials involved in environmental problems by identification, measurement, and analysis in the field and in the lab.
Transfer Credit: CSU; UC

**ESCI 104**

**OCEANOGRAPHY**

*3 UNITS*

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Credit or "C" or higher. This course consists of an introduction to the geography of the oceans, geology of the ocean basins, and the chemistry and physics of sea water. The ecology of the sea and its effect on the ocean environment are also covered. Landforms and processes of the coastal zone and use and abuse of the marine environment are also discussed. This course is not open to students who have credit for ESCI 5.

Transfer Credit: CSU; UC

ESCI 106
WEATHER AND CLIMATE  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Credit or "C" or higher.

This course is a survey of the processes and patterns in the atmosphere which result in the regional distribution of weather and climate.

Transfer Credit: CSU; UC

ESCI 110
INTRODUCTION TO EARTH SCIENCE  4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Credit or "C" or higher.

This course is designed for the non-science major. It is not open to those with college credit in geology, physical geography or physical anthropology. It is an integrated course designed to give broad, general knowledge in the area of physical geography, oceanography, geology, meteorology.

Transfer Credit: CSU; UC

*UC credit limits may apply. No credit for ESCI 110 if taken after a college course in Geology, Geography, or Astronomy.

ESCI 180
EARTH SCIENCE MATERIALS AND PREPARATIONS  1 UNIT
Class hours: 3 lab
Prerequisite: A college course in the earth sciences with a grade of Credit or "C" or higher.

This course is designed primarily for earth science majors. It includes the use and care of earth science materials with particular reference to the preparation and demonstration of laboratory set-ups. An introduction to stockroom procedures is included. As an alternative, a special project resulting in a report or display on some specific topic is possible. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

ECONOMICS

(Humanities/Social Sciences Division)

ECON 101
US AND GLOBAL ECONOMY TO ECONOMIC ISSUES AND POLICY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.

This is a one-semester survey of basic economic concepts and institutions stressing the role of the United States in the global economy. The course presents the foundations of economic analysis and applications of the market-oriented economy, role of government, and relationships and comparisons with the world economy. It is designed for students who desire an economic perspective without an intensive or technical investigation.

Transfer Credit: CSU; UC

*UC credit limits may apply. No credit for ECON 101 if taken after ECON 202.

ECON 102
ECONOMIC JUSTICE  3 UNITS
Class hours: 3 lecture
Corequisite: None.

This course is an introduction to the global economy from the perspectives of women in developing countries. Drawing from various disciplinary fields such as ethics, history, political science, anthropology and postcolonial studies, it examines critically the processes of globalization that impact the multiple identities and oppressions which shape women's lives with respect to race, gender, class and culture. This course studies the consequences of strategies of modernization and neocolonialism employed by agencies of economic development such as the World Bank and International Monetary Fund on the lives of women in the developing countries and the surrounding ecological environment. This course is not open to students who have received credit in WS 206.

Transfer Credit: CSU; UC

ECON 201
PRINCIPLES OF MACROECONOMICS  3 UNITS
Class hours: 3 lecture/1 lab arr.
Prerequisite: MATH 40 or equivalent with a grade of Credit or "C" or higher, or satisfactory completion of the Math Placement Process.

Recommendation: ENGL 100 or equivalent with a grade of Credit or "C" or higher.

This one-semester course emphasizes the study of the macro-economy, business cycles of prosperity and recession, unemployment and inflation, Keynesian and classical theories, aggregate spending and the level of economic activity, banking and interest rates and the Federal Reserve, international trade and finance.

Transfer Credit: CSU; UC

ECON 202
PRINCIPLES OF MICROECONOMICS  3 UNITS
Class hours: 3 lecture/1 lab arr.
Prerequisite: None.
Corequisite: None.

Recommendation: ENGL 100 or equivalent with a grade of Credit or "C" or higher.

This course emphasizes microeconomics: the study of the behavior of specific markets, firms, and consumers in a market economy. This is an introduction to economics, which is the study of how scarce resources are used to produce and distribute goods and services. The principles of economic choice and opportunity costs are emphasized. This behavior of firms in competitive and monopolized market is explored.

Transfer Credit: CSU; UC

ECON 204
MONEY, ETHICS, AND ECONOMIC JUSTICE  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.

Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.

Students will study the ethical issues such as pros and cons of capitalism, ethics of inequality, responsibilities to the poor, ethics and honesty in business, job responsibility, social obligations of corporations, affirmative action, and sexual harassment.

Transfer Credit: CSU; UC

EDUCATION/ELEMENTARY SCHOOL TEACHERS

(Humanities and Social Sciences Division)
EDEL 100  
INTRODUCTION TO TEACHING AND LEARNING IN DIVERSE CONTEMPORARY CLASSROOMS  1 UNIT  
Class hours: 1 lecture  
Prerequisite: Enrollment in the Cerritos College Teacher Training Academy (Teacher TRAC) or CSULB's Integrated Teacher Education Program (ITEP).  
Corequisite: None.  
Recommendation: None.  
EDEL 100 will provide students with an introduction to teaching as a profession. The course will address the qualities of an effective teacher, components and purposes of an effective professional portfolio, and critical issues in diverse contemporary classrooms. In this course, students will initiate development of their Teacher TRAC Reflective Practitioner Workbook.  
Transfer Credit: CSU

EDEL 105  
INTRODUCTION TO TEACHING (SINGLE SUBJECT CREDENTIAL)  1 UNIT  
Class hours: 1 lecture  
Prerequisite: Enrollment in the Cerritos College Teacher Training Academy.  
Corequisite: None.  
Recommendation: None.  
EDEL 105 will provide students with an introduction to the profession of teaching at the secondary level. Teaching and learning in contemporary classrooms serving diverse student populations are discussed. The course will address professional teaching standards and current educational issues. Students will begin development of their Teacher TRAC Reflective Portfolio. Ten hours of observation in a middle/high school is a required component of this course.  
Transfer Credit: CSU

EDEL 200  
INTRODUCTION TO EDUCATION  3 UNITS  
Class hours: 3 lecture  
Prerequisite: Enrollment in the Cerritos College Teacher Training Academy (Teacher TRAC) or CSULB's Integrated Teacher Educational Program (ITEP), and completion of EDEL 100 or equivalent with a grade of Credit or "C" or higher.  
EDEL 200 provides an overview of the teaching profession for students enrolled in the Teacher TRAC Program. Students will be exposed to the philosophies of education, the history of education in America, the society of education, contemporary issues in education, and the role of education in American society. This course includes 40 hours of field experience.  
Transfer Credit: CSU

EDUCATIONAL TECHNOLOGY  
(Technology Training and Distance Education Division)

EDT 19  
FUNDAMENTALS OF TELECONFERENCING  1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course introduces students to teleconferencing - the interactive transmission of images, sound, data, and control between two or more sites using digital lines. Emphasis will be placed on teleconferencing as a research and training tool in fields such as finance, health care, education, criminal justice, child care, and entertainment. Students will participate in live teleconferences and employ electronic technologies. This course may be taken a maximum of 4 times.

EDT 20  
TELECONFERENCING FOR SMALL GROUPS  2 UNITS  
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course introduces students to the concepts and vocabulary of teleconferencing in small rooms and seminars. Emphasis is placed on safety, scheduling, event planning, "wrap-around" activities, audio and video fundamentals, audiographics, and networking. Students will critically review videos of professional, small-group encounters. This course may be taken a maximum of 2 times.

EDT 21  
TELECONFERENCE TELEMATICS  1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course develops students' facility in developing telematics media, which employ both analog and digital technologies. Emphasis is placed on those production elements necessary to teleconferencing, including stage and set design, visual and audio media, meeting and conference protocols, and information gathering and distribution. This course may be taken a maximum of 4 times.

EDT 22  
TELECONFERENCE REVIEW AND EVALUATION  1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course introduces students to the evaluation criteria of teleconferenced events. Students will attend events at the Teleconference Center and the local area and produce written evaluations that employ objective and subjective measurements, audience feedback, and principles of quality control. This course may be taken a maximum of 4 times.

EDT 23  
TELECONFERENCE PRODUCTION  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course provides students with direct experience in producing, directing, and evaluating live, interactive teleconferences, including auditorium, small group, and classroom site events. Emphasis is placed on safety, scheduling, event planning, "wrap-around" activities, audio and video fundamentals, audiographics, and networking. Students will co-produce and critically review live teleconference events. This course may be taken a maximum of 3 times.

EDT 24  
TELECONFERENCE PORTFOLIO  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course helps students prepare a video demonstrating their expertise of interactive, teleconferenced meetings and events. The course is a requirement for all students completing the Certificate in Teleconferencing Practitioner. This course may be taken a maximum of 3 times.

EDT 30  
FUNDAMENTALS OF INSTRUCTIONAL MULTI-MEDIA PRODUCTION  2 UNITS  
Class hours: 2 lecture/1 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
The Fundamentals of Instructional Multi-Media Production course focuses on the multi-media skills needed to work within today's educational environments. The course provides a foundation in the use of multi-

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
media production equipment, computer software applications, and other resources to support educators and educational programs. This course may be taken a maximum of 2 times.

**EDT 43**  
**EDUCATIONAL OCCUPATION/WORK EXPERIENCE**  3 UNITS  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: Enrollment in 7 or more units, including Educational Occupation Work Experience in a declared educational major.  
Three units of Educational Occupation Work Experience require 180 non-paid hours or 225 paid hours of work per semester.  
Work experience provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences in the educational work place. The goal of the program is to assist students in expanding specific job skills. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to a career in education must be completed at the training site. Second semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. Three units of Educational Occupation Work Experience requires 180 non-paid hours of work or 225 paid hours of work per semester. This course may be taken a maximum of 2 times.

**EDT 50**  
**PREPARATION FOR ONLINE LEARNING**  1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course teaches students the skills necessary to successfully complete a class on the Internet. Topics include study skills, online student profiles, introduction to the Internet and the World Wide Web, using email and other online services, and basic aspects of word processing.

**EDT 51**  
**EMAIL FOR EDUCATORS**  1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course trains educators and prospective educators who wish to learn about email and how to incorporate email into the academic environment. Participants will learn the fundamentals of email use and management techniques. Emphasis is placed on email within the educational community. Educational topics will include creating lesson plans that utilize email as part of an activity, netiquette, and issues surrounding student safety and security.

**EDT 52**  
**WINDOWS FOR EDUCATORS**  1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EDT 50 or EDT 51 or equivalent with a grade of Credit or “C” or higher.  
This course trains educators and prospective educators in the use of the Microsoft Windows operating environment/system. Topics include desktop settings, file and print management, features of the Windows menu system, Windows attributes, and program management.

**EDT 53**  
**MACINTOSH FOR EDUCATORS**  1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EDT 50 or EDT 51 or equivalent with a grade of Credit or “C” or higher.  
This course trains educators and prospective educators in the use of Macintosh computers in an academic setting. Topics include desktop settings, file and print management, features of the Macintosh menu bar system, attributes, and program management.

**EDT 57**  
**APPLE/CLARIS WORKS FOR EDUCATORS**  1 UNIT  
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is intended to teach educators the basics of Inspiration, a popular software product for the K-12 learning environment. Topics include creating, managing, and delivering multimedia presentations. Students will produce stacks, buttons, objects, and animations using HyperStudio. Using the Internet and other resources, students will research lesson plans ideas utilizing HyperStudio to incorporate into their curricula. This course may be taken a maximum of 4 times.

**EDT 65**  
**ADVANCED HYPERSTUDIO**  1 UNIT  
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is intended to teach educators more advanced features of HyperStudio, a popular software product for the K-12 learning environment. Topics include adding movies, sounds, and photos to the multimedia presentations, printing to video, and posting on the Internet. Students will learn to use New Button Actions (NBAs), linking to the Web, and scripting with HyperStudio. Using the Internet and other resources, students will create classroom projects and assessment tools to incorporate into their curricula. This course may be taken a maximum of 4 times.

**EDT 66**  
**POWERPOINT FOR FUTURE TEACHERS**  1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EDT 50 or EDT 51, EDT 52 or EDT 53, and EDT 110 or equivalent with grades of Credit or “C” or higher.  
This course teaches presentation graphics using Microsoft PowerPoint. Topics covered include creating, managing, and delivering a curriculum-based presentation. Students will produce conceptual and data-intensive presentations, speaker notes, and handouts incorporating text and graphics.

**EDT 67**  
**INSPIRATION PRESENTATIONS**  1 UNIT  
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is intended to teach educators the basics of Inspiration, an “idea-mapping” and outlining software tool used in education. Students will create presentation diagrams and outlines to build and reinforce ideas. Students will learn to link presentations directly to the
World Wide Web. Using the Internet and other resources, students will create lesson plans to incorporate into their curricula. This course may be taken a maximum of 4 times.

**EDT 68**
**USING KIDPIX**  1 UNIT
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is intended to teach educators how to use and teach KidPix, a popular software product for the K-6 learning environment. Topics include creating desktop publishing projects, multimedia projects, and animation using KidPix. Using the Internet and other resources, students will create lesson plans to incorporate into their curricula. This course may be taken a maximum of 4 times.

**EDT 70**
**EXCEL FOR FUTURE TEACHERS**  1 UNIT
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EDT 50 or EDT 51, EDT 52 or EDT 53, and EDT 110 or equivalent with grades of Credit or "C" or higher.  
This course trains educators and prospective educators in the use of electronic spreadsheets using Microsoft Excel. Topics include the fundamentals of creating worksheets, formulas, and functions, creating charts, Wizards, and techniques to manipulate large worksheets and multiple-sheet workbooks.

**EDT 81**
**VIDEOS FOR SCHOOL USE**  2 UNITS
Class hours: 4 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course is intended to teach educators the basics of video production for use in the K-12 environment. The course will cover equipment, adding text, graphics, and special effects, scripting, interviewing, and editing. This course may be taken a maximum of 2 times.

**EDT 100**
**INTEGRATION OF THE INTERNET INTO CURRICULUM**  2 UNITS
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or "C" or higher.  
This course is designed for educators who wish to learn about the Internet and how to incorporate the Internet into the classroom curriculum. Participants will learn fundamental and advanced Internet search methods, email use and management, and techniques for setting up and using a website in the classroom. A supportive learning environment will be provided where educators collaborate to improve their skills in creating effective learning resources using suitable technologies.  
Transfer Credit: CSU

**EDT 101**
**CREATING CURRICULUM PROJECTS**  1 UNIT
Using the Internet  
Class hours: 1 lecture  
Prerequisite: EDT 100 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: None.  
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or "C" or higher.  
This course is designed for educators who wish to learn about the Internet through innovative curriculum projects. Participants will use fundamental Internet search methods, e-mail and web sites in the creation of an Internet-based project supporting project–or problem-based learning. A supportive learning community will be provided where educators collaborate and improve their skills in creating effective learning resources using suitable technologies. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues.  
Transfer Credit: CSU

**EDT 102**
**CREATING TECHNOLOGY-BASED CURRICULUM**  1 UNIT
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EDT 110 or equivalent with a grade of Credit or "C" or higher.  
This course is designed for educators and future educators who wish to expand their Internet and technology-integration skills to be used when developing classroom curriculum. Participants will learn to create Internet ready curriculum and methods for using a website in the classroom. A supportive learning environment will be provided where educators and future educators collaborate to improve their skills in creating effective learning resources using suitable technologies.  
Transfer Credit: CSU

**EDT 103**
**SPREADSHEETS FOR EDUCATORS**  2 UNITS
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or "C" or higher.  
This course trains educators and prospective educators to use efficiently technology to perform administrative, instructional, and other classroom tasks using electronic spreadsheet software. Spreadsheet-specific topics include the fundamentals of creating worksheets; formulas and functions; creating charts; using Wizards; techniques to manipulate large worksheets and multiple-sheet workbooks; and integration of spreadsheet software into course curriculum. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues.  
Transfer Credit: CSU

**EDT 104**
**WORD PROCESSING FOR EDUCATORS**  2 UNITS
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or "C" or higher.  
This course trains educators and prospective educators who wish to learn how to work with word processing documents as they prepare curriculum. Participants will use basic and intermediate word processing functions to create administrative, instructional, and classroom management documents. Word processing topics include creating, editing, saving, formatting, printing, spell checking, searching, replacing, headers and footers, footnotes and hyphenation, thesaurus, macros, merging and outlining functions. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues.  
Transfer Credit: CSU

**EDT 105**
**POWERPOINT FOR EDUCATORS**  2 UNITS
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or "C" or higher.  
This course trains educators and prospective educators who wish to learn how to work with Microsoft PowerPoint as a mode of
teaching and as they prepare curriculum. Participants will use basic and intermediate presentation graphic software functions to create administrative, instructional, and classroom management materials. Topics include creating, managing, and delivering a multi-media curriculum-based presentation. Students will produce conceptual and data-intensive presentations, create professional output for overheads, on-screen presentations, speaker notes, and support handouts incorporating text and graphics. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues.

Transfer Credit: CSU

EDT 106
ACCESS FOR EDUCATORS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or “C” or higher.
This course trains educators and prospective educators in the use of database management systems using Microsoft Access. Topics include techniques for building a database, tables, queries, and reports. Other topics include designing curricular lessons and student assignments utilizing databases.

Transfer Credit: CSU

EDT 107
DESKTOP PUBLISHING FOR EDUCATORS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or “C” or higher.
This course provides an introduction to the functions of desktop publishing software with an emphasis on the educational community. Topics include creating camera-ready printed presentation materials and developing presentation materials such as letterhead stationery, signs and flyers, newsletters, and a personal portfolio. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues.

Transfer Credit: CSU

EDT 108
PHOTOSHOP ELEMENTS FOR EDUCATORS 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or “C” or higher.
This course is for educators with little or no experience creating or designing web pages. Topics of instruction will be web concepts, principles of good web design, special populations compliance, and school web site planning and building. Other topics include educational applications of the World Wide Web, copyright, plagiarism, and security issues.

Transfer Credit: CSU

EDT 109
DEVELOPING CAMPUS-BASED PORTFOLIOS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers the basic through advanced features of Adobe Photoshop Elements. Students will be introduced to the fundamentals of Adobe Photoshop Elements while discovering practical and creative uses of the application to increase speed and quality of learning in the classroom. Methods of integrating this software into the educational setting will be explored. Digital stories and photo essays will be used as an alternative learning style.

Transfer Credit: CSU

EDT 110
INTRODUCTION TO EDUCATIONAL TECHNOLOGY 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Introduction to Educational Technology is designed to prepare future teachers with the understanding of how to utilize computers in the educational environment. Participants will learn basic computer terminology, fundamental Internet tools, basic word processing, the use of electronic spreadsheets and use of database management systems. A supportive learning community will be provided where future educators will learn skills in creating effective learning resources using suitable technologies.

Transfer Credit: CSU

EDT 111
WEB DESIGN FOR EDUCATORS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or “C” or higher.
This course is for educators with little or no experience creating or designing web pages. Topics of instruction will be web concepts, principles of good web design, special populations compliance, and school web site planning and building. Other topics include educational applications of the World Wide Web, copyright, plagiarism, and security issues.

Transfer Credit: CSU

EDT 112
VIRTUAL CURRICULUM IN EDUCATION 1 UNIT
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or “C” or higher.
This course is intended to teach educators how to create conferenced and on-line (virtual) curriculum projects for use in the classroom and on the World Wide Web. Students in this course will be given guidelines for developing virtual museums, field trips, on-line exhibits, and exploratoriums from idea conception to the resulting conference or web pages for posting on the Internet.

Transfer Credit: CSU

EDT 115
TECHNOLOGY INTEGRATION CONSIDERATIONS FOR EDUCATORS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or “C” or higher.
This course trains educators and prospective educators who wish to learn how to integrate technology into classroom teaching and learning. Topics include computer terminology, evaluation of digital media, locating technology resources for specific subject areas, adaptation of lesson plans to incorporate technology, and using multimedia in education. Other topics include impact of technology on education; past, current, and future technology trends, and copyright, plagiarism, and security issues.

Transfer Credit: CSU

EDT 119
HARDWARE AND SOFTWARE CONSIDERATIONS FOR EDUCATORS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or “C” or higher.
This course is for educators and prospective
Announcement of Courses

EDT 121
USING HANDHELD COMPUTERS IN EDUCATION  2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Credit or “C” or higher.
This course trains educators and prospective educators in the use of handheld computers in education to perform administrative, instructional, and other classroom functions. Specific topics include the basics of using Palm OS handhelds, as well as more advanced functions such as productivity tools, student information system tools, assessment tools, web clipping, e-books, science probes, and writing tools. Other topics include policy and management issues related to handhelds and forming a plan for a school’s use of handhelds.
Transfer Credit: CSU

EDT 122
FUNDRAISING/GRANT WRITING FOR EDUCATORS  2 UNITS
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers the basics of grant seeking, grant writing, and other forms of fundraising that will enable educators to obtain money for technology and other educational programs. The course will cover the process, structure, and skills to develop a conceptual framework for fundraising research, planning, writing skills and strategies. Budgetary considerations, budgetary planning, and presentation skills will also be addressed.
Transfer Credit: CSU

EDT 125
FUNDAMENTALS OF ONLINE TEACHING  2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EDT 50 or EDT 51, EDT 104, EDT 111, and EDT 52 or EDT 53 or equivalent with grades of Credit or “C” or higher.
This course is designed for educators and future educators who wish to learn the fundamentals of teaching online courses. Students will learn online course structures and delivery methods.
Transfer Credit: CSU

NON-CREDIT (ADULT EDUCATION) CLASSES
AED 90.7 (Not degree applicable)
SUPERVISED ASSISTANCE FOR TECHNOLOGY-BASED COURSES  0 UNIT
Class hours: 3 lab
Open Entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course increases student knowledge of educational technology resources on computers improves student’s use of education technology for successful completion of technology-based course assignments and empowers student confidence in utilizing educational technology. Special attention will be given to skills necessary for success in distance education courses. (Formerly EDT 6T/READ 5T)

ELECTRONICS
(Technology Division)

EL 37L (Not degree applicable)
TROUBLESHOOTING SERVICE AND REPAIR LABORATORY  2 UNITS
Class hours: 6 lab
Prerequisite: EL 202 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This is a laboratory course only. It is designed for advanced students who wish to improve their proficiency in servicing and troubleshooting electronic equipment. This course may be taken a maximum of 2 times.

EL 43/44 (Not degree applicable)
ELECTRONICS OCCUPATIONAL WORK EXPERIENCE  3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Electronics work experience 73 or 20 hours of employment per week for Electronics work experience 74. The employment must be in a job related to the student’s educational goal.
Corequisite: (1) Enrollment in the Electronics vocational program with 7 or more units including occupational work experience. Work experience/career internship provides the opportunity for Electronics students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 4 times.

EL 50
ELECTRONIC TESTS AND MEASUREMENTS  1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: EL 100 or equivalent with a grade of Credit or “C” or higher.
This is a course in the use of electronic testing equipment. Topics include measurement theory, techniques, limitations of test equipment, and interpretation of test results. This course may be repeated for a maximum of 2 times.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
and sizes of microprocessor systems will be discussed. This course prepares the student for the hardware portion of A+ Certification. Laboratory assignments will accompany the lecture material. Some familiarity with a high-level programming language is recommended.

EL 55
NETWORK Cabling TECHNOLOGY  
Class hours: 1 lecture/3 lab  
Prerequisites: None.  
Corequisite: None.  
This course will prepare the student for the network cabling specialist certification. Topics will include identification, description, application, and configurations of various cables and terminations. Troubleshooting cables for shorts and opens, transposals and reversals, and understanding pin configurations will also be covered. This course may be taken a maximum of 3 times.

EL 56
PROGRAMMABLE LOGIC CONTROLLERS  
Class hours: 3 lecture/2 lab  
Prerequisite: EL 100 or equivalent with a grade of "C" or higher, or appropriate work experience.  
Corequisite: None.  
This course introduces the student to programmable logic controllers (PLC). Topics to be discussed include history of the PLC, ladder diagrams, programming techniques, programming languages, installation, troubleshooting, and maintenance of the PLC.

EL 57
ELECTRONIC PROJECT DESIGN AND FABRICATION  
Class hours: 1 lecture/2 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: EL 100.  
This course is an introduction to the methods and techniques of electronic prototype design, layout, fabrication and packaging. Topics covered in this course include component identification, basic shop tools, basic breadboarding, chassis construction, printed circuit fabrication, and assembly. Skills gained shall include parts and component procurement using catalogs and the Internet (search, soldering, wiring and prototyping). This course may be taken a maximum of 3 times.

EL 60
COMPUTER AIDED CIRCUIT ANALYSIS  
Class hours: 1 lecture/2 lab  
Prerequisite: EL 100 or equivalent with a grade of "C" or higher, or appropriate work experience.  
Corequisite: None.  
This course is an introduction to the fundamentals of computer-aided circuit simulation and electronic design automation (EDA). The emphasis is on the use of the computer in designing and testing electronic circuits for more productive hardware construction. This course may be taken a maximum of 3 times.

EL 62
OPTOELECTRONICS  
Class hours: 3 lecture/1 lab  
Prerequisite: EL 100 or equivalent with a grade of "C" or higher, or appropriate work experience, and satisfactory completion of the Math Placement Process or TM 50 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: None.  
Recommendation: None.  
This is a course in the fundamentals of optoelectronics. Topics to be covered include the behavior of light, optics, light sources, lasers, displays, detectors, optical sensors, optocouplers, and fiber optics.

EL 64A
FUNDAMENTALS OF TELECOMMUNICATION ELECTRONICS  
Class hours: 3 lecture/1 lab  
Prerequisite: EL 120 or equivalent with a grade of "C" or higher, or appropriate work experience.  
Corequisite: None.  
Recommendation: EL 134 or EL 114 and EL 124 or equivalent with grades of Credit or "C" or higher.  
This is an introductory course about the electronic principles of computer and communication networks. Course content includes an introduction to networking, Presentation and exploration of the basic aspects of telecommunications and telecommunication systems, spectra, modulation, transmission media, multiplexing techniques, circuit switching, error detection and correction, and circuit testing will also be included.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course presents the principles of motor control. Topics to be discussed include safety, classifications of motors, speed control, and motor applications.

**EL 94**
**INTRODUCTION TO DIGITAL SIGNAL PROCESSING**
3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: EL 200 and EL 244 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: EL 210 or equivalent with a grade of Credit or “C” or higher.
This course introduces the student to the concepts of digital signal processing (DSP). Topics to be covered include DSP chip architecture, interfacing, programming, digital filtering, voice recognition, and telecommunications applications. Laboratory experiments will demonstrate the application of DSP devices.

**EL 96A**
**INTRODUCTION TO AUTOMATED MANUFACTURING (ROBOTICS)**
4 UNITS
Class hours: 3 lecture/3 lab
Prerequisites: EL 134 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course provides an overview of the current robotics industry starting with a brief history which is followed by a review of the basic terms used in the field. The robots are classified by geometry, power source, application, path control and intelligence. The operation of different types of end effectors is covered along with robot controllers and the basic system sensors. Basic programming techniques are covered.

**EL 96B**
**AUTOMATED MANUFACTURING (ADVANCED ROBOTICS)**
4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: EL 96A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is designed to prepare technicians in robotics design and research, robot applications, installations, programming, “start-up” procedures, customer service, troubleshooting and maintenance. The technician will have an understanding in integrated systems. The course covers the operation of work cells including vision systems, tactile sensing, offline programming, interfacing to external computers, and voice input and output. Use of vision and touch sensing will be emphasized.

**EL 100**
**BASIC ELECTRONICS**
4 UNITS
Class hours: 4 lecture
Prerequisite: None.
This is a survey course intended for non-electronics majors. It satisfies the general requirements in electronics for Industrial Arts Teacher Training at state universities. It is also an acceptable substitute for the electronics background required as a prerequisite to enter the electronics program. The course will cover DC and AC electrical theory, magnetism, transistors, and integrated circuits. Basic concepts of electronic devices, circuits, and systems will be demonstrated.
Transfer Credit: CSU

**EL 110**
**PRINCIPLES OF DC ELECTRONICS**
4 UNITS
Class hours: 4 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers atomic structure and the electron theory, Ohm’s and Kirchhoff’s laws for DC circuits, magnetism, inductance, capacitance, DC measurements, and DC network analysis.
Transfer Credit: CSU

**EL 110L**
**DC ELECTRONICS LABORATORY**
1 UNIT
Class hours: 3 lab
Prerequisite: None.
Corequisite: Concurrent enrollment or completion of EL 110 or equivalent with a grade of credit or “C” or higher.
Recommendation: EL 100.
Experiments performed in this course are planned to accompany the lectures in EL 110. The student learns to use instrumentation in the measurement and analysis of DC circuits. Color code, symbols, schematics and assembly techniques are introduced.
Transfer Credit: CSU

**EL 114**
**FUNDAMENTALS OF DIGITAL ELECTRONICS**
3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: EL 100 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Math Placement Process or MATH 20 or equivalent with a grade of Credit.
EL 120L
FUNDAMENTALS OF DIGITAL ELECTRONICS LAB 1 UNIT
Class hours: 3 lab
Prerequisite: EL 110L or equivalent with a grade of Credit or “C” or higher.
Corequisite: EL 120L.
This is a laboratory course designed to support the concepts learned in EL 120. Experiments are used to verify the applications of number systems, Boolean algebra, logic symbols, and computer codes. Design projects are assigned to be constructed using integrated circuits and computer simulations. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

EL 120
PRINCIPLES OF AC ELECTRONICS 4 UNITS
Class hours: 4 lecture
Prerequisites: EL 110 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This course covers the analysis of AC circuits using both resistive and reactive components. The concept of resonance and filter circuits is introduced and network theorems are studied.
Transfer Credit: CSU

EL 124
ADVANCED DIGITAL ELECTRONICS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 114L or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This course is a continuation of the principles learned in EL 114. The material includes flip-flops, multivibrator circuits, sequential logic circuits, memory systems interfacing, and an introduction to microprocessors.
Transfer Credit: CSU

EL 124L
ADVANCED DIGITAL ELECTRONICS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 114L or equivalent with a grade of Credit or “C” or higher.
Corequisite: EL 124L or equivalent.
This is a laboratory course designed to support the concepts learned in EL 124. Experiments are used to verify the applications of flip-flops, multivibrator circuits, sequential logic circuits, memory systems, interfacing, and microprocessors. Design projects are assigned to be constructed using integrated circuits and computer simulations.
Transfer Credit: CSU

EL 134
DIGITAL CIRCUITS AND COMPUTER LOGIC 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: EL 134L.
This course introduces the student to the fundamentals of digital electronics. The content includes number systems, Boolean algebra, combinational and sequential logic circuits, memory systems, and programmable logic devices including GALs, PALs, FPGA, VHDL, CPLD, and interfacing techniques. TTL integrated circuits are used in the laboratory to implement student-designed projects.
Transfer Credit: CSU

EL 134L
DIGITAL CIRCUITS AND COMPUTER LOGIC LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 134 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.
Corequisite: None.
This is a laboratory course designed to support the concepts learned in EL 134, Digital Circuits and Computer Logic. Experiments are used to apply the use of number systems, Boolean algebra, and logic symbols to the design and construction of combinational and sequential digital electronic circuits. Basic multivibrator, memory, microprocessor, and programmable logic devices including GALs, PALs, FPGA, VHDL, CPLD, and interfacing techniques will also be covered. Students will use hardware description languages such as CUPL and VHDL. Design projects will be constructed using integrated circuits and computer simulations.
Transfer Credit: CSU

EL 200 Semi conductor Electronics 3 UNITS
Class hours: 3 lecture
Prerequisites: EL 120L or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.
Corequisite: None.
This course covers the theory of operation of semiconductor devices and development and analysis of the basic circuits employed in analog electronic systems.
Transfer Credit: CSU

EL 200L
SEMICONDUCTOR ELECTRONICS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 120L or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.
Corequisite: Concurrent enrollment or completion of EL 200 or equivalent with a grade of Credit or “C” or higher.
This course introduces the student to the fundamentals of semiconductor devices and development and analysis of the basic circuits employed in analog electronic systems. Experiments are planned to accompany the lectures in EL 200 covering semiconductor diodes, transistors and transistor amplifiers are included in this course.
Transfer Credit: CSU

EL 202
RADIOD TV THEORY AND SERVICING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment, or appropriate work experience.
Theory of superheterodyne receivers and practice in servicing of electronic circuits with special emphasis on commercial radio and television receivers will be explored.
Transfer Credit: CSU
EL 205
BIO-MEDICAL ELECTRONICS 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is an introduction to the basics of Bio-Medical Electronics. Topics will include the theory of operation of various electronic circuits; the theory of regulation and control of Bio-Medical Electronics Instrumentation. It will also include practice in servicing of electronic circuits with special emphasis on Commercial Medical Electronics.
Transfer Credit: CSU

EL 210
ELECTRONIC SYSTEMS ANALYSIS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 200 or equivalent with a grade of Credit or “C” or higher, or concurrent enrollment.
Corequisite: None.
Recommendation: EL 210L or equivalent with a grade of Credit or “C” or higher or concurrent enrollment.
This is an advanced course which covers the theory of operation of various electronic systems; the analysis of switching and logic circuits; the theory of regulation and control systems, power supplies, and phase locked loops.
Transfer Credit: CSU

EL 210L
SYSTEMS ANALYSIS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: EL 200L or equivalent with a grade of Credit or “C” or higher, or concurrent enrollment.
Corequisite: Concurrent enrollment or completion of EL 210 with a grade of Credit or “C” or higher.
Recommendation: None.
Experiments planned to accompany the lectures in EL 210 covering power supplies, oscillators, switching and logic circuits, and phase locked loops are included in this course.
Transfer Credit: CSU

EL 212
ELECTRONIC COMMUNICATIONS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 200 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course covers the principles of electronic communications with particular emphasis on transmitters, receivers, antennas, and transmission lines. Applications in commercial, military and amateur equipment are discussed. FCC rules and regulations are included.
Transfer Credit: CSU

EL 212L
ELECTRONIC COMMUNICATIONS LAB 1 UNIT
Class hours: 3 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: EL 212.
Recommendation: None.
This course is designed to provide laboratory experiences in communications circuits and devices. The experiments correlate with the lecture material in EL 212 - Electronic Communications.
Transfer Credit: CSU

EL 215
BIO-MEDICAL INSTRUMENTS 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: EL 200 or equivalent with a grade of Credit or “C” or higher, or concurrent enrollment.
Corequisite: None.
This course is a study of the theory, application, operation, calibration and troubleshooting of Bio-Medical Electronics Instrumentation. It will also include practice in servicing of electronic circuits with special emphasis on Commercial Medical Electronics.
Transfer Credit: CSU

EL 220
LINEAR INTEGRATED CIRCUITS 3 UNITS
Class hours: 3 lecture
Prerequisite: EL 200 or equivalent with a grade of Credit or “C” or higher, or concurrent enrollment.
Corequisite: None.
This course is an introduction to the principles of linear circuits in integrated form. Emphasis is on the operational amplifier, how it functions in theory and practice, its wide range of applications, and its limitations.
Transfer Credit: CSU

EL 222
ADVANCED RADIO AND TV SERVICING 3 UNITS
Class hours: 2 lecture, 4 lab
Prerequisite: EL 202 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is a study of the special types of circuitry employed in radio and television receivers, including deflection oscillators and amplifiers, high voltage circuits, pulse amplification, high frequency tuners, color circuitry, and multiplex circuits.
Transfer Credit: CSU

EL 244
INTRODUCTION TO MICROCOMPUTERS 4 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: EL 100 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: EL 60 and EL 134.
This course is an introduction to the fundamental operations of a general purpose microcomputer. The course will include a study of the memory system, the microprocessor, and input/output circuits. The basic instruction/execute cycle will be discussed and microprocessor machine level programming will be introduced.
Transfer Credit: CSU

ENERGY
(Science/Engineering/Math Division)
ENGY 110
ENERGY AND
THE WAY WE LIVE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Credit or “C” or higher.
This introductory course describes the importance of energy in natural systems, energy resources, and the utilization of energy by Man in modern economies. The potential for conservation and use of alternatives to the fossil fuels is studied.
Transfer Credit: CSU; UC

ENGINEERING
(Science/Engineering/Math Division)

ENGR 112
ENGINEERING GRAPHICS 3 UNITS
Class hours: 6 lecture/lab
Prerequisite: None.
Recommendation: MATH 140 or equivalent with a grade of Credit or “C” or higher.
The principles of the graphic language of the engineer expressed through sketching and instrument drawings covering orthographic projection, primary and secondary auxiliary views, dimensioning, and the working drawing. The descriptive geometry methods applied to points, lines, planes, intersections, warped surfaces, developments, and graphical mathematics. Required of all engineering students.
Transfer Credit: CSU; UC

ENGR 123
DESCRIPTIVE GEOMETRY 3 UNITS
Class hours: 6 lecture/lab
Prerequisite: MATH 140 or TM 50 and ENGT 153 or equivalent with grades of Credit or “C” or higher.
This course covers the fundamental principles of descriptive geometry. The course emphasizes applications of these principles to solutions of three dimensional engineering and design technology problems.
Transfer Credit: CSU; UC

ENGR 215
ENGINEERING ELECTRIC CIRCUITS 3 UNITS
Class hours: 3 lecture
Prerequisite: PHYS 202 or equivalent with a grade of Credit or “C” or higher.
This course includes the study of the fundamental principles essential to understanding electric circuits. These include Kirchhoff’s Laws, Ohm’s Law, network theorems, mesh and nodal analysis, Thevenin and Norton equivalent, inductors and capacitors, resistor capacitor and resistor coil circuits, and sinusoidal steady-state analysis and calculations.
Transfer Credit: CSU; UC

ENGR 235
STATICS 3 UNITS
Class hours: 3 lecture
Prerequisite: MATH 170 and PHYS 101 or PHYS 201 or equivalent with grades of Credit or “C” or higher.
This course covers the part of the science of mechanics that deals with external force systems and equilibrium conditions on bodies.
Transfer Credit: CSU; UC

ENGINEERING DESIGN TECHNOLOGY
(Technology Division)

ENGT 116
BLUEPRINT READING FOR MACHINE TRADES 2 UNITS
Class hours: 1.5 lecture/1.5 lab
Prerequisite: None.
This course is a study of working drawings and blueprints used in manufacturing. Emphasis is placed on the ability to visualize and interpret typical drawings. Research is required into standards, specifications, procedures, bulletins, and techniques, which are a parallel part of the shop drawing system. It is intended to prepare the student for accurate interpretation of drawings in order to carry out the applications required or use them as appropriate reference.
Transfer Credit: CSU

ENGT 117
GEOMETRICAL DIMENSIONING AND TOLERANCING 2 UNITS
Class hours: 2 lecture
Prerequisite: ARCH 111 or ENGT 131 or equivalent with a grade of Credit or “C” or higher.
This is a basic course in datums, modifiers, form tolerancing, positional tolerance, and coordinate tolerance conversion. It will introduce students to the state of the art in dimensioning and tolerancing used in industry.
Transfer Credit: CSU

ENGT 131
FUNDAMENTALS OF DESIGN INCLUDING AUTOCAD 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
This course, for students who have had no high school mechanical drafting, stresses proper use of manual drafting instruments and computer-aided design (CAD) using AutoCAD software for lettering, geometric construction, isometric drawing, orthographic projection, dimensions, single auxiliary views, sectioning, and conventional practices.
Transfer Credit: CSU

ENGT 133
SHEET METAL LAYOUT AND APPLICATIONS WITH INVENTOR 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: ARCH 123 or ENGT 138 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This course will familiarize students with sheet metal layout involving triangulation, bend allowances for pattern development, and manufacturing processes for sheet metal. It will also include practical modern day applications in architecture, automotive, advertising displays and other areas affected by this technology.
Transfer Credit: CSU

ENGT 138
FUNDAMENTALS OF COMPUTER AIDED DESIGN WITH AUTOCAD 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: ENGT 131 or ARCH 111 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
This is an introduction to computer-aided design using AutoCAD software. It will prepare students to operate the systems and understand the applications of computer graphics utilizing industry standards. Students will learn to use an interactive computer graphics system to prepare drawings on personal computers. Drawings will be stored and retrieved from digital storage, enabling students to produce commercial quality copies using a computer-driven plotter and printer. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ENGT 151
ADVANCED APPLICATIONS OF COMPUTER AIDED DESIGN W/AUTOCAD 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: ARCH 123 or ENGT 138 or
ENGT 237
GRAPHICAL STATICS AND STRENGTH OF MATERIALS 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: ARCH 123 or ENGT 138 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: TM 50 or equivalent.
This is a course in the fundamental principles of graphical statics and strength of materials and their applications to the solutions of typical force systems and equilibrium problems. Applications are made in the fields of drafting, tool engineering, and similar areas using elementary algebra and right angle trigonometry in problem solving.
Transfer Credit: CSU

ENGT 257
AUTODESK INVENTOR 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: ARCH 123 or ENGT 138 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course assists students in advanced applications of three-dimensional parametric part modeling, assembly modeling, surface modeling, and bills of materials. Students receive instruction utilizing the most recent release of Autodesk Inventor.
Transfer Credit: CSU

ENGL 15
BEGINNING WRITING 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 15 or ESL 200 or equivalent with a grade of Credit or “C” or higher.
Recommended: None.
This course is designed to reduce beginning writing students’ fear and anxiety about writing. It develops writing fluency through written assignments designed to teach and reinforce conventions of standard English. This course focuses on sentence structure and development and sentence combining. Students will work toward developing short paragraphs.

ENGL 20 (Not degree applicable)
BASIC WRITING 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 15 or ESL 200 or equivalent with a grade of Credit or “C” or higher.
This course introduces students to the writing process as a means of developing ideas into
clear, correct, and effective writing. The course focuses on short essay writing in accord with the conventions of standard English.

ENGL 22 (Not degree applicable)
SPELLING BASICS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with instruction in editing their own writing for standard spelling. This course is offered on a credit/no credit basis only.

ENGL 30 (Not degree applicable)
GRAMMAR BASICS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with instruction in editing their own writing for standard grammar. This course is offered on a credit/no credit basis only.

ENGL 31 (Not degree applicable)
PUNCTUATION BASICS 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with instruction in editing their own writing for standard punctuation. This course is offered on a credit/no credit basis only.

ENGL 32 (Not degree applicable)
SPELLING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to help students overcome deficiencies in spelling by learning the patterns of language through a step by step instructional approach. The student learns to apply principles of spelling to groups of English words, from simple to complex.

ENGL 33 (Not degree applicable)
INDIVIDUALIZED WRITING 0.5 UNIT
Class hours: 27 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course assists students in improving and expanding writing and thinking skills needed for successful communication in their careers and/or professions. The course is taught by diagnostic-prescriptive methods, technology mediated instruction, and individualized instruction. This course may be taken a maximum of 4 times.

ENGL 50A
ENGLISH GRAMMAR 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Students will study the fundamentals of English grammar, with an emphasis on parts of speech, phrases and clauses, sentence structure, and correct usage. Class hours may be used to qualify a student for the certified shorthand reporters’ examination.

ENGL 50B
ADVANCED GRAMMAR 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 50A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course further develops the student’s ability to analyze the structure of English sentences, to recognize and correct errors in usage, punctuation and grammar, and to generate sentences of varied complexity. Class hours may be used to qualify a student for the certified shorthand reporters’ examination.

ENGL 52
INTRODUCTION TO COLLEGE COMPOSITION 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher.
This course develops the students’ ability to write clearly, effectively, and correctly by guiding students through the writing process. Students write a series of compositions that integrate critical thinking, evaluative writing, and library research.

ENGL 53
PUNCTUATION, CAPITALIZATION AND SPELLING 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course gives comprehensive instruction in the preparation of written materials, with particular emphasis on punctuation, capitalization, abbreviations, numbers, spelling, and manuscript formatting. Class hours may be used to qualify a student for the certified shorthand reporter’s examination.

ENGL 100
FRESHMAN COMPOSITION 4 UNITS
Class hours: 4 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course guides the student through the writing process to develop expository prose with an emphasis on effective organization and on correctness. (It meets transfer requirements at four-year institutions.)
Transfer Credit: CSU; UC

ENGL 101
CRITICAL THINKING THROUGH LITERATURE 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
In this course students apply critical thinking skills, close textual analysis, and research practices in writing analytic, argumentative essays about literary fiction, poetry, and drama.
Transfer Credit: CSU

ENGL 102
FRESHMAN COMPOSITION AND LITERATURE 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 100 or equivalent with a grade of Credit or “C” or higher.
This course continues to develop and improve students’ skills in composition and critical analysis by introducing the study of fiction, poetry, and drama, produced by an enlarged canon of authors who reflect culturally diverse backgrounds as the subject for writing assignments.
Transfer Credit: CSU; UC

ENGL 103
CRITICAL AND ARGUMENTATIVE WRITING 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 100 or equivalent with a grade of Credit or “C” or higher or a satisfactory completion of the Advanced Placement English Examination of the College Entrance Examination Board.
Corequisite: None.
Recommendation: None.
This course develops critical thinking, reading, and writing beyond the level achieved in English 100 (Freshman Composition). The course focuses on the development of logical reasoning and analytical and argumentative writing skills.
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

248
ENGL 106
INTRODUCTION TO LINGUISTICS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is the study of language structure and language use. This includes the historical development of language families, the universal properties of these languages, and the individual speech acts that derive from a given language.
Transfer Credit: CSU; UC

ENGL 107
VOCABULARY BUILDING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a course in vocabulary building that emphasizes the structural approach to vocabulary study. Emphasis is placed on the prefixes, roots, and suffixes as they combine to form words, and on the meanings and patterns of meanings formed by words in the context of a sentence and paragraph.
Transfer Credit: CSU

ENGL 108
VOCABULARY BUILDING FOR PROFESSIONALS 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course is designed to further an understanding of word origins, roots and affixes, with particular attention to terms used in business and the professional disciplines. Class hours may be used to qualify a student for the certified shorthand reporters' examination.
Transfer Credit: CSU

ENGL 155
TECHNICAL WRITING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course enhances students’ ability to write clear, effective, and correct technical prose. Students write a series of technical instructions, reports, manuals, and proposals that integrate critical thinking, evaluation, and research. Students will produce a letter of application and resume for technical fields.
Transfer Credit: CSU

ENGL 221A
LITERATURE IN THE BIBLE: HEBREW SCRIPTURES 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a general introduction to the literature composing the Hebrew Scriptures (more familiarly known as the Old Testament) in translation. Emphasis will be on understanding the Bible as a literary document through literary analysis, including the study of biblical genres such as history, poetry, narrative, drama, and homiletic, prophetic, apocalyptic and wisdom literature.
Transfer Credit: CSU; UC

ENGL 221B
LITERATURE IN THE BIBLE: CHRISTIAN SCRIPTURES 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies the New Testament in English in translation as a literary document. Emphasis is on understanding the literary nature of the Bible through literary analysis, including the study of literary genres such as poetry, epistolary, narrative, drama and biography.
Transfer Credit: CSU; UC

ENGL 222
CHILDREN’S LITERATURE 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
The course is designed to survey children's literature with special emphasis on the classics. It concentrates on the fable, folktales, fairy tales and the children's novel.
Transfer Credit: CSU; UC

ENGL 223
CHICANA/O LITERATURE 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is a study of selected representative literature of Chicano authors. Selected works will be drawn from at least three of the following genres: the novel, the short story, poetry, drama, autobiography, and the essay.
Transfer Credit: CSU; UC

ENGL 224
NATIVE AMERICAN LITERATURE 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is a study of selected representative literature of Native North American Indian writers. The genres included are the novel, the short story, poetry, autobiography, and essay.
Transfer Credit: CSU; UC

ENGL 225
MEXICAN LITERATURE IN TRANSLATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
A one-semester course to survey Mexican literature in translation. The genres included will be the novel, the short story, the poem, the essay, and the song.
Transfer Credit: CSU; UC

ENGL 226
AFRICAN AMERICAN LITERATURE 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is a study of selected or representative literature of African and African American authors, their viewpoints, styles, forms, and themes. The genres included will be the novel, the short story, poetry, autobiography, essays, and oral performance. Modern and contemporary authors will be highlighted.
Transfer Credit: CSU; UC

ENGL 227
CURRENT LITERATURE 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a study of literature currently important or currently popular and not ordinarily studied in the regular departmental...
ENGL 228  SHAKESPEARE’S PLAYS  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a general introduction to Shakespeare’s plays. Representative selections from the comedies, histories, tragedies, and romances are studied. The emphasis is on discussion and analysis of Shakespeare’s relevance to his world and to ours. (This is not an acting class.)
Transfer Credit: CSU; UC

ENGL 229  AUTOBIOGRAPHICAL LITERATURE/Writing  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course will advance composition skills in the special area of autobiography through journal writing and the development of a significant autobiography. Autobiographical works by important writers will be read for modeling purposes.
Transfer Credit: CSU; UC

ENGL 230A (CAN ENGL SEQ Q)(CAN ENGL 14) INTRODUCTION TO AMERICAN LITERATURE  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies the representative works of American literature from 1608-1870. Selected works will be drawn from the four major literary periods: Puritan, Enlightenment/Revolutionary, Romantic, and early Realism.
Transfer Credit: CSU; UC

ENGL 230B (CAN ENGL SEQ Q)(CAN ENGL 16) INTRODUCTION TO AMERICAN LITERATURE  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies the drama from its ancient Greek origins to its present-day expressions. It emphasizes both content and form and highlights the literary techniques specific to this genre of literature.
Transfer Credit: CSU; UC

ENGL 232  READINGS IN POETRY  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course introduces students to the basic elements and functions of poetry. The fundamentals of poetics will be covered from Aristotle to new media and digital mediations. A representative poet will be studied in depth.
Transfer Credit: CSU; UC

ENGL 233  READINGS IN THE NOVEL  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This is a course in the novel emphasizing structure, theme and style. Outstanding Continental, English and American novels are studied.
Transfer Credit: CSU; UC

ENGL 234  READINGS IN SHORT FICTION  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies the structure and techniques of the short story and the novelette. Emphasis is on critical analysis of selected American, European and World short fiction throughout time, including contemporary works.
Transfer Credit: CSU; UC

ENGL 235  READINGS IN THE DRAMA  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies the representative works of American literature from 1870-1990’s. Selected works will be drawn from the four major literary periods: Realism, Naturalism, Modernism, and Postmodernism.
Transfer Credit: CSU; UC

ENGL 236  STUDIES IN WOMEN’S LITERATURE  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is a survey of literature by women reflecting women’s changing roles and identities in society in various historical, political and cultural settings. Works studied are drawn from the genres of poetry, fiction, drama, essays and journals.
Transfer Credit: CSU; UC

ENGL 237  ASIAN AMERICAN LITERATURE  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course offers a study of selected representative literature written by Americans of Asian or Pacific Island descent. Genres and their historical context include the novel, drama, short story, and poetry. Memoirs and essays may also be included.
Transfer Credit: CSU; UC

ENGL 240  CREATIVE WRITING  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course provides an opportunity for students to explore their interest in literary creativity by writing original short fiction, poetry, play or screenplay, or magazine article(s). Writers will gain understanding of each literary type, have the opportunity to create in each area, and be afforded the chance to have their work critiqued in a workshop setting. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ENGL 241  SCREENWRITING  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or
ENGL 245
WORLD MYTHOLOGY
AS LITERATURE  
3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course studies the developments, structures, and techniques of comparable myths from a variety of cultures. Emphasis is on critical analysis of selected creation, hero, and fertility myths and literary expression.
Transfer Credit: CSU; UC

ENGL 248B
MASTERPIECES OF WORLD LITERATURE  
3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course studies Western and world literature from the ancient world to the 17th century. Various themes, forms and trends are examined in an effort to understand the universal problems of mankind.
Transfer Credit: CSU; UC

ENGLISH AS A SECOND LANGUAGE
(Liberal Arts Division)

ESL 1 (Not degree applicable)
ENGLISH AS A SECOND LANGUAGE:
INTRODUCTION  
5 UNITS
Class hours: 5 lecture/1 lab
Prerequisite: None.
This course is designed for ESL students who wish to improve in fundamental reading skills. The emphasis will be on phonics, word recognition skills, and basic thinking as they relate to reading.

ESL 2 (Not degree applicable)
INTERMEDIATE SKILLS
FOR THE ESL STUDENT  
5 UNITS
Class hours: 5 lecture/1 lab
Prerequisite: Satisfactory completion of the English As a Second Language Placement Process or ESL 1 or equivalent with a grade of Credit or “C” or higher.
This course introduces advanced and high-frequency structures of English and provides practice of these structures. Texts and supplemental materials are used as well as the students’ environment. Sounds continue to be practiced orally. Writing and reading reinforce comprehension.

ESL 3 (Not degree applicable)
ADVANCED INTERMEDIATE
SKILLS FOR THE ESL STUDENT  
5 UNITS
Class hours: 5 lecture/1 lab
Prerequisite: Satisfactory completion of the English As A Second Language Placement Process or ESL 2 or equivalent with a grade of Credit or “C” or higher.
This course introduces advanced and high-frequency structures of English and provides practice of these structures. Texts and supplemental materials are used as well as the students’ environment. Sounds continue to be practiced orally. Writing and reading reinforce comprehension.

ESL 10 (Not degree applicable)
ESL SPEAKING AND LISTENING  
3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Students practice oral communication and listening skills. Emphasis is on fluency, correct word usage, and syntax. Topics range from everyday situations to elementary abstractions.

ESL 11 (Not degree applicable)
ESL FUNDAMENTAL
READING SKILLS  
1.5 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed for ESL students who wish to improve in fundamental reading skills. The emphasis will be on phonics, word recognition skills, and basic thinking as they relate to reading.

ESL 12 (Not degree applicable)
ESL PRONUNCIATION  
1.5 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
This course aids the students in reproducing the sounds of American English accurately. Attention focuses on the individual needs of the students. This course may be taken a maximum of 2 times.

ESL 14 (Not degree applicable)
PRONUNCIATION PLUS  
3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is an intensive pronunciation course that includes practice with the sounds of American English in varying contexts: syllables, words, sentences, and conversation and an in-depth practice of the stress and intonational patterns of American English. Enunciation (production of sounds with clarity and precision) of American English in varying
contexts will be stressed. Each student will be evaluated and assisted with his/her pronunciation difficulties. This course may be taken a maximum of 2 times.

**ESL 20** (Not degree applicable)
**ESL SPEAKING AND LISTENING** 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Recommendation: ESL 10 or equivalent with a grade of Credit or “C” or higher.

This course is for ESL students who wish to improve speaking skills. Emphasis is on building vocabulary, dictionary skills, and word recognition skills to be used in everyday language and college courses. Students will be introduced to the most frequently used English words and will also learn how to infer meaning from context.

**ESL 21A** (Not degree applicable)
**ESL INTERMEDIATE VOCABULARY** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is for ESL students who wish to improve vocabulary skills. Emphasis is on building vocabulary, dictionary skills, and word recognition skills to be used in everyday language and college courses. Students will be introduced to the most frequently used English words and will also learn how to infer meaning from context.

**ESL 21B** (Not degree applicable)
**ESL ADVANCED VOCABULARY** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is for advanced ESL students who wish to improve vocabulary skills at a level beyond that of the intermediate. The emphasis is on general and specialized vocabulary development, advanced dictionary skills, word recognition skills, improvement of sight vocabulary, and application of advanced vocabulary in context techniques.

**ESL 22** (Not degree applicable)
**ESL ORAL COMMUNICATION** 1.5 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
This course identifies and improves the production of American speech sounds. Students prepare, practice and present various oral messages. Emphasis is on stress and intonation. Topics center on students’ needs and personal experiences. This course may be taken a maximum of 2 times.

**ESL 23** (Not degree applicable)
**ESL SPELLING** 1.5 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
This course introduces basic spelling rules and provides students with the opportunity for practice orally and in writing. Texts and supplemental materials will be used to reinforce the relationship between oral and written expression. This course may be taken a maximum of 2 times.

**ESL 31** (Not degree applicable)
**ESL READING** 1.5 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course improves the literal, interpretive and critical comprehension skills of the students. Emphasis is on identifying main ideas and significant details, sequence of relationships, inferences of fact and tone, figurative language, and propaganda.

**ESL 32** (Not degree applicable)
**AMERICAN EXPRESSIONS AND CULTURE** 1.5 UNITS
Class hours: 3 lecture
Prerequisite: None.
Students study American expressions and cultural customs. Students incorporate common expressions in their conversation and writing. Social customs, such as those regarding time, dress, guest behavior, gestures, and selected public encounters, are discussed.

**ESL 33** (Not degree applicable)
**ENGLISH FOR SPECIFIC PURPOSES** 1.5 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is for students who need work in oral and written English skills in their field. It provides an opportunity to become familiar with situations particular to their field. This course may be taken a maximum of 2 times.

**ESL 34** (Not degree applicable)
**ESL STUDY SKILLS** 1.5 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is for the student who plans on entering college classes and wants to improve listening skills and learning techniques. Emphasis is on methods for reading text books efficiently, taking notes, understanding textbook assignments, and preparing for examinations.

**ESL 35** (Not degree applicable)
**EDITING FOR ADVANCED GRAMMAR AND SYNTAX** 1.5 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
This course is designed for the advanced ESL students in writing courses who need help with grammar troublespots that cause difficulties in writing. Rather than provide English grammar review, the course concentrates on rules to help the student apply general principles. It will aid in finding ways to examine and evaluate writing in terms of grammatical accuracy. This course may be taken a maximum of 4 times.

**ESL 100**
**ESL WRITING AND STRUCTURE** 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: Satisfactory completion of the English As A Second Language Placement Process or ESL 3 or equivalent with a grade of Credit or “C” or higher.

This course reviews syntax and sentence structure. Students write complex sentences in imitative and original essays. Written summaries are also included.

Transfer Credit: CSU;UC*
*UC credit limits may apply. Any or all of these ESL courses with #’s combined: maximum credit, 8 units.

**ESL 200**
**ESL WRITING AND STRUCTURE** 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: Satisfactory completion of the English As A Second Language Placement Process or ESL 100 or equivalent with a grade of Credit or “C” or higher.

Students study the sentence in context. They learn to eliminate mechanical errors and faulty sentence structure from their writing. Students review grammatical structures and punctuation. They write original paragraphs based on personal experience and use ideas drawn from supplemental materials.

Transfer Credit: CSU;UC*
*UC credit limits may apply. Any or all of these ESL courses with #’s combined: maximum credit, 8 units.

**NON-CREDIT (ADULT EDUCATION) CLASS**
**AED 90.36** (Not degree applicable)
**INDIVIDUAL ESL TUTORIAL** 0 UNIT
Class hours: 3 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: Enrollment in any Cerritos College course.

This course assists students in reinforcing, expanding, and improving the skills related to their specific English as a Second Language concerns. The course is taught using diagnostic-prescriptive methods, technology-mediated instruction, and individual and small group instruction. (Formerly ESL 36T)
FRENCH

(Liberal Arts Division)

FREN 101 (CAN FREN SEQ A) (CAN FREN 2)
ELEMENTARY FRENCH 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: None.
This beginning French course emphasizes listening, speaking, reading and writing and helps to develop the appreciation of cultural diversity through the study of differences and similarities between cultures.
Transfer Credit: CSU; UC

FREN 102 (CAN FREN SEQ A) (CAN FREN 4)
ELEMENTARY FRENCH 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: FREN 101 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of the study of the basic principles of French with an emphasis on oral and written communication. It helps continue to develop the appreciation of cultural diversity through the study of differences and similarities between cultures.
Transfer Credit: CSU; UC

FREN 201 (CAN FREN 8) (CAN FREN SEQ B)
INTERMEDIATE FRENCH 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: FREN 102 or equivalent with a grade of Credit or “C” or higher.
This course provides a review and in-depth study of important grammatical concepts. Reading and interpretation of authentic literary works by French writers are included. Guided and original composition exercises will be assigned as a transition to free written expression. This class is conducted primarily in French.
Transfer Credit: CSU; UC

FREN 202 (CAN FREN 10) (CAN FREN SEQ B)
INTERMEDIATE FRENCH 4 UNITS
Class hours: 4 lecture
Prerequisite: FREN 201 or equivalent with a grade of Credit or “C” or higher.
This is a course in reading of modern French. Emphasis is placed on oral and written expression. Grammar review is completed. FREN 4 aims to give the student a working knowledge of the language and to form the basis for advanced work in literature or science.
Transfer Credit: CSU; UC

FREN 203
INTERMEDIATE FRENCH
ADVANCED LEVEL 1 4 UNITS
Class hours: 4 lecture
Prerequisite: FREN 202 or equivalent with a grade of Credit or “C” or higher.
This course consists of selected intermediate readings in literary and technical French designed to meet requirements of students majoring in literature, science, mathematics and engineering with a minimum basic grammar review.
Transfer Credit: CSU; UC

FREN 281
BEGINNING CONVERSATIONAL FRENCH 3 UNITS
Class hours: 3 lecture
Prerequisite: FREN 102 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive oral practice in French as used in travel, in the home, in school, in business and in everyday life. Emphasis is placed upon vocabulary, idioms, and language patterns fundamental to an active and practical use of French. This course is recommended for all French majors.
Transfer Credit: CSU; UC

FREN 282
INTERMEDIATE CONVERSATIONAL FRENCH 3 UNITS
Class hours: 3 lecture
Prerequisite: FREN 281 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive oral practice in French in the discussion of social, current, and cultural affairs. Emphasis is on the acquisition of special idioms and vocabulary suitable to conversation about current affairs and personal values. This course is primarily conducted in French and is recommended for all French majors.
Transfer Credit: CSU; UC

FREN 283
ADVANCED CONVERSATIONAL FRENCH 3 UNITS
Class hours: 3 lecture
Prerequisite: FREN 282 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive oral practice in discussion of controversial topics, expressing informed opinions regarding current affairs, the arts, and political issues. Emphasis is on creative development of arguments and analyses. Acquisition of appropriate vocabulary is stressed. This course, conducted completely in French, is recommended for all French majors.
Transfer Credit: CSU; UC

GEOGRAPHY

(Science/Engineering/Math Division)

GEOG 101 (CAN GEOG 2)
PHYSICAL GEOGRAPHY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course covers the causes of variations in weather and climate; how landscapes develop; the use of maps or other tools of a geographer; and the effect of earth motions on the seasons, time, and climate.
Transfer Credit: CSU; UC

GEOG 101L
PHYSICAL GEOGRAPHY LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: GEOG 101 or equivalent with a grade of Credit or “C” or higher, or concurrent enrollment.
Corequisite: None.
Recommendation: None.
This laboratory/field study is designed to supplement GEOG 101. It introduces the physical world, its dynamics and spatial relationship. The physical environment is presented as a integration of the atmosphere, hydrosphere, lithosphere, and biosphere. Furthermore, this course will introduce the physical processes that have shaped the earth, including weather and climate, plate tectonics, hydrological cycle, weathering, and glaciation.
Transfer Credit: CSU; UC

GEOG 102 (CAN GEOG 4)
NATURAL AND CULTURAL GEOGRAPHY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a survey of the influence of culture and the physical environment on man’s activities in major world regions. An examination of the culture, settlement patterns, agriculture, commerce, natural resources and industry of each region will be made. In addition, world trends in population growth and urbanization will be studied.
Transfer Credit: CSU; UC

GEOG 105
WORLD REGIONAL GEOGRAPHY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course investigates the major cultural and political regions of the world today. Emphasis is placed on cultural relationships, land use...
patterns, population distribution, trade and political alliances.
Transfer Credit: CSU; UC

GEOL 106
INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to Geographic Information Systems (GIS) technology, theory, and software applications. These systems allow organization and analysis of spatial data from a wide variety of academic and business areas. Students will work with data sets from a variety of disciplines, and will learn to retrieve, organize and interpret spatial data applicable to their major or career.
Transfer Credit: CSU; UC

GEOL 107
PALEONTOLOGY, LIFE OF THE PAST 4 UNITS
Class hours: 3 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Credit or “C” or higher.
This course is an introduction to the study of fossils. Fossil preservation, distribution and paleoecology are considered. Particular emphasis is placed on the fossil record as evidence of organic evolution on planet earth. Laboratory will include specimen identification. Two field trips are required.
Transfer Credit: CSU; UC

GEOL 109
EARTHQUAKES AND VOLCANOES 4 UNITS
Class hours: 3 lecture/3 lab and the equivalent of one field trip
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: MATH 60 or equivalent or satisfactory completion of the Math Placement Process.
Recommendation: None.
This course is an introduction to the study of earthquakes and volcanoes including how origins are explained by the theory of plate tectonics and how new knowledge can be applied to the betterment of human welfare.
Transfer Credit: CSU; UC

GERMAN (Liberal Arts Division)

GERM 101 (CAN GERM 2)
ELEMENTARY GERMAN 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: None.
This beginning course emphasizes listening, speaking, reading, and writing, and helps to develop an appreciation of cultural diversity through the study of differences and similarities between cultures.
Transfer Credit: CSU; UC

GERM 102 (CAN GERM 4)
ELEMENTARY GERMAN 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: GERM 101 or equivalent with a grade of Credit or “C” or higher.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course provides a continued review and in-depth study of grammatical concepts and reading and interpretation of literary works by writers of German-speaking countries. Guided and original compositions are included. This class, conducted primarily in German, will further develop the appreciation of cultural diversity.

**Transfer Credit:** CSU; UC

**GERM 201** *(CAN GERM SEQ B)(CAN GERM 8)*
**INTERMEDIATE GERMAN 4 UNITS**
Class hours: 4 lecture
Prerequisite: GERM 102 or equivalent with a grade of Credit or “C” or higher.
This course provides a review and in-depth study of grammatical concepts in the German Language. Reading and interpretation of literary works by German writers, and guided and original compositions are included. This course will further develop the appreciation of cultural diversity. This class is conducted primarily in German.

**Transfer Credit:** CSU; UC

**GERM 202** *(CAN GERM SEQ B)(CAN GERM 10)*
**INTERMEDIATE GERMAN 4 UNITS**
Class hours: 4 lecture
Prerequisite: GERM 201 or equivalent with a grade of Credit or “C” or higher.
This course provides a continued review and in-depth study of grammatical concepts and reading and interpretation of literary works by writers of German-speaking countries. Guided and original compositions are included. This class, conducted primarily in German, will further develop the appreciation of cultural diversity.

**Transfer Credit:** CSU; UC

**GERM 203**
**SCIENTIFIC GERMAN 4 UNITS**
Class hours: 4 lecture
Prerequisite: GERM 202 or equivalent with a grade of Credit or “C” or higher.
This course provides a review of grammatical concepts in the German Language and consists of selected intermediate readings of literary and technical German designed to meet requirements of students majoring in literature, science, mathematics and engineering.

**Transfer Credit:** CSU; UC

**GERM 204**
**SCIENTIFIC GERMAN 4 UNITS**
Class hours: 4 lecture
Prerequisite: GERM 203 or equivalent with a grade of Credit or “C” or higher.
This course consists of selected intermediate readings of popular appeal in scientific and technical German taken from texts published recently. It includes a basic grammar review.

**Transfer Credit:** CSU; UC

**GERM 281**
**BEGINNING CONVERSATIONAL GERMAN 3 UNITS**
Class hours: 3 lecture
Prerequisite: GERM 102 or equivalent with a grade of Credit or “C” or higher.
This course provides a review and in-depth study of grammatical concepts and reading and interpretation of literary works by writers of German-speaking countries. Guided and original compositions are included. This course is recommended for all German majors and develops the appreciation of cultural diversity.

**Transfer Credit:** CSU; UC

**GERM 282**
**INTERMEDIATE CONVERSATIONAL GERMAN 3 UNITS**
Class hours: 3 lecture
Prerequisite: GERM 281 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive oral practice in the discussion of current topics, including multi-culturalism in German-speaking countries. Emphasis is on the acquisition of special idioms and vocabulary suitable for conversation about the family, the world of work, business, sports, public transportation and ecology. This course, conducted primarily in German, is recommended for all German majors.

**Transfer Credit:** CSU; UC

**GERM 283**
**ADVANCED CONVERSATIONAL GERMAN 3 UNITS**
Class hours: 3 lecture
Prerequisite: GERM 282 or equivalent with a grade of Credit or “C” or higher.
This course provides intensive oral practice in discussion of controversial topics, expressing informed opinions regarding current affairs, the arts and political issues. Emphasis is on the acquisition of appropriate vocabulary and language patterns, and the creative development of arguments. This course, conducted in German, is recommended for all German majors.

**Transfer Credit:** CSU; UC

**GERM 291**
**GERMAN FOR INTERNATIONAL COMMERCE 3 UNITS**
Class hours: 3 lecture
Prerequisite: GERM 102 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
This course is designed to give students an understanding of physiological and mental determinants and manifestations of stress. Topics include the nature and physiology of stress, mental stress, stress as it relates...
to disease, emotions, and personality, behavior modification, communication, time management, physical exercise and nutrition. Students are also trained in a variety of stress management techniques including imagery, progressive muscle relaxation, biofeedback, problem solving techniques, state and trait anxiety inventories, centering, breathing exercises, yoga, meditation, art therapy, music therapy, and humor therapy.

Transfer Credit: CSU

HED 103
WOMEN, THEIR BODIES AND HEALTH 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will examine contemporary women's health issues and body image concerns. General topics will include images of women, lifespan changes, mental health, eating disorders, prevention of abuse and self-harm, social roles, sexual identity and sexuality, relationships, birth control and pregnancy. Current research on cardiovascular disease, cancer and other chronic conditions will be discussed as they pertain to women's issues. Students will develop the skills necessary to become wiser consumers of health and beauty-enhancing products. (This course is not open to students currently enrolled or who have completed WS 103)

Transfer Credit: CSU

HED 110
COMMUNITY FIRST AID AND CPR 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the skills required to provide basic life support in an emergency illness or injury. The course includes adult, infant and child CPR and First Aid. Upon successful completion of all tests, students will be issued an American Red Cross card for Community First Aid (3 years) and CPR (1 year).

Transfer Credit: CSU; UC

HED 200
NUTRITION FOR HEALTH, FITNESS, AND PHYSICAL ACTIVITY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an introduction to the basic nutritional principles important to physically active individuals. Content will cover the role of food in enhancing exercise and sport performance, body composition, and energy production. Current research and practical activities will be presented. This course is especially applicable for individuals interested in careers related to fitness or athletics.

Transfer Credit: CSU; UC

HEALTH OCCUPATIONS

(Higher Occupations Division)

HO 7 (Not degree applicable)
CARDIOPULMONARY RESUSCITATION 0.5 UNITS
Class hours: .50 lecture
Total semester hours: 9
Prerequisite: None.
Corequisite: None.
Recommendation: None.
The Basic Life Support for Healthcare Provider course is designed to meet the needs of healthcare professionals who respond to cardiac and respiratory emergencies. Content includes initial management of cardiac arrest, respiratory arrest, and airway obstruction in the infant, child and adult populations as well as two rescuers CPR, and use of automated external defibrillator (AED). This course may be taken a maximum of 4 times. This course is offered on a Credit/No Credit basis only.

HO 9 (Not degree applicable)
EMERGENCY MEDICAL TECHNICIAN I 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: HO 9L.
This course is designed to teach the student the basic knowledge, skills, and attitudes necessary to perform pre-hospital emergency care. The didactic portion will present various Basic Life Support (BLS) assessment tools that are included in the Emergency Medical Technician-I (Basic) scope of practice. Areas of instruction include scene and physical patient assessment, safe and the proper utilization of emergency medical equipment. The information presented will assist in the development of critical thinking skills required to complete a systematic and nationally standardized approach to caring for the ill and injured patient. Successful candidates in HO 9 and HO 9L will be eligible for verification of course completion. The combination of HO 9 and HO 9L meets the didactic, certifying skills exam, and clinical experiences set forth in the California Code of Regulations for Emergency Medical Technician hours of instruction. Additional testing and certification process is required to use the name Emergency medical Technician process is required to use the name Emergency Medical Technician-I or Basic. This course may be taken a maximum of 2 times and does not guarantee state certification. Uniform will be required. Clearical background check may be required prior to clinical field experience.

HO 53
ELECTROCARDIOGRAPHY 1 UNIT
Class hours: .67 lecture/1 lab
Prerequisite: None.
Corequisite: Current CPR for Professional Rescuer Certification
Recommendation: None.
This course will provide the student with knowledge and skills concerning the theoretical and procedural requirements for performing electrocardiography. This course follows the guidelines set forth by both state and national regulations.

HO 54
MEDICAL LABORATORY SKILLS 1 UNIT
Class hours: .67 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will provide the student with knowledge and skills concerning the theoretical and procedural requirements for performing several lab procedures. This course follows the guidelines set forth by both state and
This course presents an application of the concepts and principles of growth and development as they relate to the delivery of health care. Content includes discussion of health concerns and issues at various age levels. Emphasis will be placed upon physical, cognitive and psychosocial assessment of individuals from infancy through school-age. Not open to students who have received credit for HO 15.

Transfer Credit: CSU

HO 237
LIFE SPAN/HEALTH ISSUES 2 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course presents an application of the concepts and principles of growth and development as they relate to the delivery of health care. Content includes discussion of health concerns and issues at various age levels. Emphasis will be placed upon physical, cognitive and psychosocial assessment of individuals from adolescence through older adulthood. Not open to student who have received credit for HO 15.
Transfer Credit: CSU

HISTORY
(Humanities/Social Sciences Division)

HIST 101
AMERICAN HISTORY AND CONSTITUTION 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.
History 101 is a survey of the history of the United States from pre-colonial times to the present. Major political, social, economic, and cultural factors will be presented focusing on the roles played by the diverse peoples and cultures who shared in the development of United States history. An emphasis may be placed on one or more of these factors.
Transfer Credit: CSU; UC*

*UC credit limits may apply. HIST 101, HIST 102 and HIST 103 combined: maximum credit, 2 courses.
HIST 102  POLITICAL AND SOCIAL HISTORY OF THE UNITED STATES: 1500S TO 1876  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or “C” or higher.
The United States history tracing the development of American ideals and actions from the Pre-Revolutionary Period through the Civil War Era. Major political, social, economic, and cultural factors will be presented focusing on the roles played by the diverse peoples and cultures who shared in the development of United States history. An emphasis may be placed on one or more of these factors.
(Formerly HIST 201)
Transfer Credit: CSU; UC*
*UC credit limits may apply. HIST 101, HIST 102 and HIST 103 combined: maximum credit, 2 courses.

HIST 103  POLITICAL AND SOCIAL HISTORY OF THE UNITED STATES: 1877 TO PRESENT  3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.
A survey of United States history from 1877 to the present. The role of political, social, and economic factors and events that shaped the development of the United States. Topics covered include the changing role of the federal government in the economy and society; the emergence of multiculturalism, and the new environmentalism that shaped contemporary policy and attitudes, and the pervasive and lasting influence of mass culture, technology and media.
HIST 120  HISTORY OF CALIFORNIA  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or “C” or higher.
This course is a survey of the political, legal, economic, and social position and role of African-Americans in the history of the United States. Special emphasis will be given to the contributions of African-Americans in all aspects of American culture.
Transfer Credit: CSU; UC

HIST 204  WOMEN IN AMERICAN HISTORY  3 UNITS
Class hours: 3 hours
Prerequisite: None
Corequisite: None.
Recommendation: Satisfactory completion of an American history survey course, the Reading Placement Process or READ 54, and the English Placement process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a survey of American history focusing on women’s history in the United States from colonial times to the present. The course will focus on defining the similarities and differences in historical experiences of women based on their social class, race, and ethnicity. Topics of concentration include the changing roles of women in the private and public spheres; an analysis of the agendas, strategies, and consequences of the women’s movements; and the historical evolution of the definitions of feminism and social construction of gender. This course is not open to students who are enrolled in or have received credit in WS 204.
Transfer Credit: CSU; UC

HIST 110  AFRICAN-AMERICAN HISTORY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or “C” or higher.
This course is a survey of the political, legal, economic, and social position and role of African-Americans in the history of the United States. Special emphasis will be given to the contributions of African-Americans in all aspects of American culture.
Transfer Credit: CSU; UC

HIST 210  HISTORY OF THE UNITED STATES IN THE POST WORLD WAR II ERA  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course is a survey of the United States history from 1945 to the present. Attention is given to the political, social, intellectual, cultural, and economic changes in American society. The focus will be on the Cold War, the Cold War and Social Welfare State, the Vietnam conflict, the expansion and contraction of the social welfare state; the ways that the Vietnam conflict, emergence of multiculturalism, and the new environmentalism have shaped contemporary policy and attitudes, and the pervasive and lasting influence of mass culture, technology and media.
Transfer Credit: CSU; UC*
*UC credit limits may apply. HIST 103 and HIST 210 combined: maximum credit, one course.
HIST 221  HISTORY OF THE AMERICAS  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.  
This course is a study of the histories of the United States, Canada, and the nations of Latin America from the completion of the independence movements to the present. They are studied as an integrated whole focusing on the roles played by the diverse peoples and cultures who shaped their development. Major political, economic, social and cultural factors and issues are presented with emphasis given to emerging international relations within the Western Hemisphere during the nineteenth and twentieth centuries.  
Transfer Credit: CSU; UC

HIST 230  HISTORY OF MEXICO  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or “C” or higher.  
This course is an examination of the origins and evolution of the cultural, social, economic and political institutions, trends, events, issues, and leading personalities of Mexican History from the Pre-Columbian period to contemporary society.  
Transfer Credit: CSU; UC

HIST 235  HISTORY OF LATIN AMERICA  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.  
This course is a study of the history of Latin America from the development of pre-Columbian cultures to the present. The experiences of individual countries are studied as an integrated whole focusing on the roles played by the diverse peoples and cultures who shaped their development. Major political, economic, social and cultural factors and issues are presented.  
Transfer Credit: CSU; UC

HIST 241  (CAN HIST SEQ A) (CAN HIST 2)  WESTERN CIVILIZATION  3 UNITS  
Class hours: 3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 with a grade of Credit or “C” or higher.  
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or “C” or higher.  
History 241 is a survey of the development of Western Civilization from the pre-historic era through the mid-seventeenth century A.D. It focuses on the contributions to this development of ancient Sumer, Egypt, classical Greece, Rome, Christianity, Byzantium, Islam, the Middle Ages, the Renaissance, and the Reformation. It acquaints students with the basic institutions, personalities, documents, and writings of the Western world which have influenced contemporary events.  
Transfer Credit: CSU; UC

HIST 242  (CAN HIST SEQ A) (CAN HIST 4)  WESTERN CIVILIZATION  3 UNITS  
Class hours: 3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 with a grade of Credit or “C” or higher.  
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or “C” or higher.  
History 242 is a survey course in the history of modern Europe and the Western world from the mid-seventeenth century to the present. It emphasizes broad economic, social and changing political trends, with special attention given to the role of science, the arts and technology in creating the modern world.  
Transfer Credit: CSU; UC

HIST 245  WORLD CIVILIZATION FROM ANTIQUITY TO 1500  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: READ 54 and ENGL 52 or equivalent with grades of Credit or “C” or higher.  
This is a survey course of the roots and development of civilizations in Africa, the Americas, Asia, and Europe from the Neolithic Revolution until the age of European exploration of the Americas (1500). The civilizations of Ancient, Classical, Postclassical, and Early European periods will be studied, emphasizing interaction between civilizations and major cultures.  
Transfer Credit: CSU; UC

HIST 246  WORLD CIVILIZATION FROM 1500 TO THE PRESENT  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: READ 54 and ENGL 52 or equivalent with grades of Credit or “C” or higher.  
This is a survey course of the origin of the modern world, tracing both regional histories and global interactions. The root and development of civilizations in Africa, the Americas, Asia, and Europe from the 1500’s to the present day will be chronicled. Topics will include: the origins and the role of universal religions; the examination of political, social, and gender structures in relation to economic and demographic development; and the diffusion of culture and technology via migration, commerce and the expanse of empire.  
Transfer Credit: CSU; UC

HIST 250  HISTORY OF ENGLAND, GREAT BRITAIN AND THE COMMONWEALTH  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.  
History 250 is a survey of the history and institutions of Britain, the British Empire and The Commonwealth from the Norman Conquest to the present. It will focus upon medieval and early modern England, the creation of the first and second British Empires, and upon the development of Britain’s economic, political and social institutions since the Glorious Revolution. The evolution of The Commonwealth and developing relations with the United States will also be studied.  
Transfer Credit: CSU; UC

HIST 255  HISTORY OF RUSSIA AND THE SOVIET UNION  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.  
This course in the history of Russia encompasses
a brief introduction to the political, social, economic, and cultural development of the Russians from earliest times to the present with an in-depth emphasis on the twentieth century. Special attention is given to the Bolshevik Revolution, the emergence of Soviet totalitarianism, the collapse of the Soviet Union, and the emergence of the new Russian Republic.

Transfer Credit: CSU; UC

**HIST 260**
SURVEY OF THE
HISTORY OF ASIA 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or “C” or higher.

This course presents a general survey of the historical evolution of cultural, social, economic and political institutions and customs of the nations of Asia. The pre-19th Century sections of the course will emphasize institutions such as family, philosophies, religious viewpoints and life style. The post 18th Century periods will emphasize Western imperialism in Asia, nationalism, the independence movements, and the development of modern Asian states and societies.

Transfer Credit: CSU; UC

**HIST 265**
SELECTED PROBLEMS
IN CONTEMPORARY
ASIAN HISTORY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Credit or “C” or higher.

This course consists of a study of topical issues and problems concerning 20th century Asian history. Emphasis will be placed upon political, economic, social, and cultural institutions, Western imperialism, Asian nationalism, the emergence of modern Asian states, international relations, and contemporary Asian societies.

Transfer Credit: CSU; UC

**HIST 270**
SPECIAL TOPICS IN HISTORY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will expand on subjects and themes introduced in the core history curriculum offerings. Each topic will focus on themes, perspectives and issues of special interest to students. The specific focus of a particular offering will be decided by the course instructor and announced in the Schedule of Classes. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC credit determined after admission

**HUMANITIES**
(Fine Arts/Communications Division)

**HUM 100**
THE ART OF BEING HUMAN 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is an introductory humanities course which considers the great works of humanity through the ages in painting, music, architecture, sculpture, dance, literature, and philosophy as they relate to the universal problems of humankind and today's student. Everyone will be encouraged to develop his/her own doctrine of humanity. College level reading is required.

Transfer Credit: CSU; UC

**HUM 108**
BLACK IMAGES IN POPULAR CULTURE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Credit or “C” or higher, is strongly recommended.

This course surveys the depiction and development of images of Blacks and the stereotypes created in Western culture. The various means artists have used to counter those stereotypes by using techniques of resistance and counter narratives will be examined. Students will study fine art, comic books, comic strips, cartoons, advertising, literature, music, dance, theatre, cinema, broadcasting and television. Writing a research paper is a significant component of the course. Reading of literature theory, and criticism is required. This course is not open to students who are enrolled in or who have received credit in ART 109.

Transfer Credit: CSU

**INTERDISCIPLINARY STUDIES**
(Humanities/Social Sciences Division)

**INST 100**
PRINCIPLES AND STRATEGIES FOR PROBLEM SOLVING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.

Students will study problem-solving concepts and strategies from an interdisciplinary perspective needed to succeed as a lifelong learner. Various theories and models for learning and intellectual development of adults and college students will be addressed. Emphasis is placed on the application of metacognitive strategies and problem-solving concepts to issues and problems associated with mastering the college experience.

Transfer Credit: CSU

**INST 151**
PRINCIPLES OF RECOVERY AND PSYCHOSOCIAL REHABILITATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course provides an overview of the philosophy, practices, and perspectives used in working with people and families with mental illness. The course will introduce and familiarize students with proven recovery and rehabilitation methods that allow individuals to reintegrate into society.

Transfer Credit: CSU
HELPING RELATIONSHIPS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
The course will introduce and familiarize students with skills and theories necessary for creating an effective partnership between service provider and service recipient. Students will learn techniques for service planning, advocating, empowering, and community reintegration.
Transfer Credit: CSU

JAPANESE 5 UNITS
(Liberal Arts Division)

JAPN 101 ELEMENTARY JAPANESE 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: None.
This beginning Japanese course emphasizes listening, reading, writing, and speaking and helps to develop the appreciation of cultural diversity through the study of differences and similarities between cultures.
Transfer Credit: CSU; UC

JAPN 102 ELEMENTARY JAPANESE 5 UNITS
Class hours: 5 lecture + 1 hr. lab. arr.
Prerequisite: JAPN 101 or equivalent with a grade of Credit or “C” or higher.
This beginning course continues to emphasize listening, reading, writing, and speaking and helps to continue to develop the cultural diversity through the study of differences and similarities between cultures.
Transfer Credit: CSU; UC

JAPN 201 INTERMEDIATE JAPANESE 5 UNITS
(CAN JAPN 8)
Class hours: 5 lecture + 1 lab
Prerequisite: JAPN 201 or equivalent with a grade of Credit or “C” or higher.
This course provides a review and in-depth study of Japanese grammatical concepts. Reading and interpretation of literary works by Japanese writers and guided and original compositions are included. This course will further develop the appreciation of cultural diversity. This class is primarily conducted in Japanese.
Transfer Credit: CSU; UC

JAPN 202 INTERMEDIATE JAPANESE 4 UNITS
Class hours: 4 lecture
Prerequisite: JAPN 201 or equivalent with a grade of Credit or “C” or higher.
This course is a review and in-depth study of Japanese grammatical concepts. Reading and interpretation of literary works by Japanese writers and original compositions are included. This course will further develop the appreciation of cultural diversity. This class is primarily conducted in Japanese.
Transfer Credit: CSU; UC

JAPN 281 BEGINNING CONVERSATIONAL JAPANESE 3 UNITS
Class hours: 3 lecture
Prerequisite: JPAN 102 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course is a review and in-depth study of Japanese grammatical concepts, and requires written composition and oral discussion. This course, conducted primarily in Japanese, completes the study of all aspects of the Japanese language at the intermediate level.
Transfer Credit: CSU; UC

JAPN 282 INTERMEDIATE CONVERSATIONAL JAPANESE 3 UNITS
Class hours: 3 lecture
Prerequisite: JPAN 281 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides intensive oral practice in the discussion of current topics, including multiculturalism in Japanese-speaking countries. Emphasis is on the acquisition of special idioms and vocabulary suitable for conversation about the family, the world of work, business, sports, public transportation and ecology. This course, conducted primarily in Japanese, is recommended for all Japanese majors.
Transfer Credit: CSU; UC

JAPN 283 ADVANCED CONVERSATIONAL JAPANESE 3 UNITS
Class hours: 3 lecture
Prerequisite: JPAN 282 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides intensive oral practice in discussion of controversial topics and expressing informed opinions regarding current affairs, the arts, and political issues. Emphasis is on the acquisition of appropriate vocabulary and language patterns, and the creative development of arguments. This course, conducted in Japanese, is recommended for all Japanese majors.
Transfer Credit: CSU; UC

JOURNALISM
(Fine Arts/Communications Division)

JOUR 50L EDITORIAL BOARD 1 UNIT
Class hours: 3 lab
Prerequisite: None.
Corequisite: JOUR 103 or JOUR 105 or JOUR 160L.
Limitation of enrollment: editors of campus media.
Recommendation: None.
This course focuses on leadership aspects using the school newspaper, Talon Marks; the online newspaper, talonmarks.com; and the school magazine, Wings, as practical laboratories. Enrollments are limited to those named to editor positions of these campus media. This course may be taken a maximum of 4 times.

JOUR 100 MASS COMMUNICATIONS AND SOCIETY 3 UNITS
(CAN JOUR 4)
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
The course examines the impact of mass media in national and international political, economic, cultural and behavioral contexts. It assesses contemporary trends in media-society relations; historical facts that have shaped the structures, practices and products of the mass media industries and trends in media-society relations.
Transfer Credit: CSU; UC

JOUR 101 BEGINNING NEWSWriting AND REPORTING 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the ENGL 102 or equivalent with a grade of Credit or “C” or higher and typing ability.
Corequisite: None.
This course focuses on the principles of gathering and writing, with emphasis on journalistic writing. Basic news story structure and development, news evaluation, gathering methods, interviewing, and reporting are discussed. This course satisfies the Journalism Writing Proficiency requirement.
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
The course is particularly recommended for English and communications majors and those planning careers in news media, public relations, communications, corporate communications and news and informational media.

Transfer Credit: CSU; UC*  
*UC credit limits may apply. JOUR 101 and JOUR 201 combined: maximum credit, one course.

JOUR 103  
NEWSPAPER ARTICLE WRITING  
2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: JOUR 101 or equivalent with a grade of Credit or “C” or higher or concurrent enrollment, and satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
This course focuses on media article writing using the school newspaper, Talon Marks, as a practical laboratory. Students research, write, and edit articles for the school paper as they practice the skills of gathering information from a variety of sources, synthesizing a story and preparing it for dissemination to others. Ethics and legal aspects of communication are also covered. This course may be taken a maximum of 4 times. Credit/No Credit option available for non-journalism majors.  
Transfer Credit: CSU

JOUR 105  
NEWSPAPER PRODUCTION  
2 UNITS  
Class hours: 1 lecture/3 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: ART 188 or CIS 205 or JOUR 120 or equivalent with a grade of Credit or “C” or higher.  
This course uses desktop publishing. World Wide Web publishing and photojournalistic techniques for publishing of information. The school newspaper, Talon Marks, is used as a practical laboratory. Presentation of information in a visual form is emphasized. This course is for page designers, graphic artists, cartoonists and photographers. This course may be taken a maximum of 4 times. Credit/No Credit option available for non-journalism majors.  
Transfer Credit: CSU

JOUR 106  
TALONMARKS.COM  
1 UNIT  
Class hours: 0.5 lecture/2 lab  
Prerequisite: None.  
Corequisite: None.

JOUR 110  
PRINCIPLES OF PUBLIC RELATIONS  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This class explores the basic theories and principles of communicating information and concepts. Emphasis is on techniques and methods, with attention given to identifying audiences, using public relations tools, planning public relations programs and campaigns, promoting favorable relations with various segments of the public, and dealing with problem solving. The effective use of public information, publicity, and advertising is covered.  
Transfer Credit: CSU

JOUR 111  
INTRODUCTION TO NEWSLETTERS  
1 UNIT  
Class hours: 1 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: ENGL 52 or JOUR 101 or equivalent with a grade of Credit or “C” or higher.  
This course focuses on the preparation of content for newsletters of all professions and special interests. Students will discuss news values in selecting and writing content, writing and editing techniques, and careers in newsletter journalism. Students will gain hands-on experience in choosing, writing and editing content for publication in preparation for the newsletter design.  
Transfer Credit: CSU

JOUR 112  
COPY EDITING SKILLS  
1.0 UNITS  
Class hours: 1 lecture/0.5 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Concurrent enrollment or completion of JOUR 101 with a grade of “C” or higher.  
This course focuses on copy editing and word skills for journalists. Students will practice applying Associated Press style rules to stories and improving sentences structure, spelling, and general grammar skills commonly found in news stories. This course is recommended for journalism students who wish to improve copy editing skills. Skills acquired will be useable in various job markets, including newsletter, newspaper, magazine, book, and online publishing.  
Transfer Credit: CSU

JOUR 120  
INTERNET FOR JOURNALISTS  
2 UNITS  
Class hours: 2 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: CIS 121 or equivalent with a grade of Credit or “C” or higher.  
This course will provide a basic introduction to resources found on the Internet and the World Wide Web. Students will access the Internet to research trends in media use of the World Wide Web and learn to create on-line news and journalistic web pages. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU

JOUR 130  
PHOTO JOURNALISM  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: PHOT 100 or equivalent with a grade of Credit or “C” or higher.  
This course deals with the photographer as a journalist, focusing on theory and practice in press and publications photography, with an emphasis on using the camera as a reporting and communications tool. Topics include news and feature photography and photographic essays, including composition, impact, and creativity, for newspapers, magazines, Internet and other mass communications media. Students must have access to a 35 mm camera. This course is not open to students who are enrolled in or who have received credit in PHOT 130.  
Transfer Credit: CSU

JOUR 160L  
COLLEGE MAGAZINE PRODUCTION  
1 UNIT  
Class hours: 3 lab  
Prerequisite: None.  
Corequisite: JOUR 103 or JOUR 105 or PHOT 102 or PHOT 112 or ENGL 240 or ART 188.  
This course offers study and practical experience in planning content and layout and in editing the college magazine. If provides a format for the application of photojournalism,
feature article and page design skills, and writing skills. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

JOUR 170
BROADCAST NEWS 1 UNIT
Class hours: 1 lecture/3 lab
Prerequisite: Concurrent enrollment or completion of JOUR 101 with a grade of Credit or "C" or higher.
Corequisite: Enrollment in 7 or more units, including Occupational Work Experience in Journalism, in a declared Journalism major.
One unit of Occupational Work Experience in Journalism requires 60 non-paid hours or 75 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the students/workers, the college, and the employers/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their approved projects are completed. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

JOUR 201
ADVANCED REPORTING AND EDITING 3 UNITS
Class hours: 3 lecture
Prerequisite: JOUR 101 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
This course covers advanced theory and practice in news writing and reporting with emphasis on handling of news, editing complex stories, copy reading, headline writing, opinion writing, news release writing, sports feature writing, news release writing, and writing news for World Wide Web presentation.
Transfer Credit: CSU; UC

JOUR 220
FEATURE ARTICLE WRITING 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher, and typing ability.
This course covers non-fiction writing for newspapers and magazines, including a study of story types, sources, methods, and markets. Individualized styles and approaches will be studied.

Transfer Credit: CSU

LIBRARY
(Learning Resource Center)

LIBR 100
INTRODUCTION TO LIBRARY RESOURCES 1 UNIT
Class hours: 1 lecture/1 lab arranged
Prerequisite: None.
This is an open-entry, open-exit, self-paced course which emphasizes the use of library methods and materials that will enable students to locate information for course-related study and research. This course is of special value to those students intending to transfer to four-year institutions. This course is to be offered on a credit/no credit basis.

Transfer Credit: CSU; UC

MACHINE TOOL TECHNOLOGY
(Technology Division)

MTT 1L (Not degree applicable)
NUMERICAL CONTROL SPECIALTY 1 UNIT
Class hours: 3 lab
Prerequisite: MTT 51 or MTT 76 and MTT 52 or equivalent with grades of Credit or "C" or higher.
This course is an independent study on an experimental and research basis, using CAM software or CNC programming skill and knowledge in specialized areas of the student's choice with the approval and guidance of the department chairperson. The course may be taken a maximum of 4 times.

MTT 2L
MASTERCAM LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: MTT 51 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This lab course is intended to complement MasterCam classes. It is designed to give practical experience in working with the current release of the software program. The course will increase the skill and output of the student in areas of his/her choice. This course may be taken a maximum of 4 times.

MTT 3L
VIRTUAL GIBBS LABORATORY 1 UNIT
Class hours: 3 lab
Prerequisite: MTT 76 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This lab course is intended to complement Virtual Gibbs classes. It is designed to give practical experience in working with the current release of the software program. The course will increase the skill and output of the student in areas of his/her choice. This course may be taken a maximum of 4 times.
Announcement of Courses

MTT 51
MASTERCAM INTRODUCTION 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None
This course will prepare students to operate the MasterCAM Programming Systems in conjunction with various multi-axis computer numerical control simulators. Students will learn to create and import CAD geometry, create proper job plans, and input the resultant data into virtual CNC machinery.

MTT 52
SETUP AND OPERATION OF CNC MILLING MACHINES 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course instructs students in the safe and accurate setup and production operation of CNC milling machines of up to 4 axes. Students will learn how to load programs, align fixtures, select offsets, select cutter radius compensation, and run first article parts.

MTT 53L
MACHINIST LABORATORY 0.5 UNIT
Class hours: 2 lab
Prerequisite: MTT 100, MTT 60, or MTT 62 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course is designed to apply acquired skills and knowledge in machining with the lathe, mill, drill press, grinder and inspection devices and other machines and devices associated with the machine shop environment.

MTT 54
CNC BLUEPRINT READING 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to familiarize the student with blueprints and the conversion of blueprint data to workable fabrication data unique to the CNC machine shop. It will cover tool offset conversion, location, and identification of missing and pertinent coordinates, ANSI Y-14.5, visualization, and identification of attributes important to CNC programming.

MTT 55
SUPPLEMENTAL MACHINE SHOP STUDIES 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to broaden the knowledge of the student machinist with a survey of blueprint reading, metallurgy, metrology, tooling, and use of the Machinery’s Handbook.

MTT 56
CNC SHOP INSPECTION 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to give students a complete understanding of metrology and to develop skills using shop instruments for validation of part geometry. Students will be generating inspection reports from their findings.

MTT 57
SETUP AND OPERATION OF CNC LATHES 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course instructs students in the safe and accurate set up and production operation of CNC lathes. Students will learn how to create programs using MasterCam, load programs, select offsets, select cutter radius compensation, and will run first article parts. This course may be taken a maximum of 2 times.

MTT 60
ADVANCED MACHINE TOOL CONCEPTS 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MTT 100 or equivalent with grades of Credit or “C” or higher or equivalent.
Corequisite: None.
Recommendation: MTT 100 or equivalent.
This course is designed to extend the students’ skills in modern machine tool operation and set up as well as to augment their knowledge of conventional and automated process techniques. Coursework includes refining complex geometric inspection techniques, developing advanced skills in lathe and mill setup, materials science, and learning Computer Aided Process Planning (CAPP).

MTT 62
FIXTURE TOOLING 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MTT 54 and MTT 60 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course teaches planning, design, and fabrication of fixturing for the CNC shop. It includes decision making, machine planning, cutter selection, tolerancing, rest areas, clamping, blueprint interpretation, and design.

MTT 70
INTRODUCTION TO MODEL MAKING AND PROTOTYPE DESIGN 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will introduce students to model making and prototype design by creating 3D solid parts using Rhinoceros software. Students will also learn how to export 3D models to Roland’s computer aided Machining software and create appropriate tool paths using Modela software.

MTT 71
PROTOTYPE AND MODEL FABRICATION 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will prepare students in the fabrication of prototypes and models. Students will learn how to import a 2D model created by software, how to scan and digitize models using Dr. Picza software, and how to create models using Modela 3D Text. Students will generate tool paths using Roland’s Modela software, transfer toolpaths to CNC machines, and fabricate prototypes and models.

MTT 76
GIBBSCAM INTRODUCTION 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course prepares students to operate the Gibbscam Programming System in conjunction with various multi-axis Computer Numerical Control (CNC) simulators. Students will learn to create and import computer aided drafting (CAD) geometry, create proper job plans, and input the resultant data into virtual CNC machinery.

MTT 80
CAD/CAM MOLD MACHINING 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MTT 100 or equivalent with a grade of Credit or “C” or higher or appropriate work experience.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course is designed to instruct the student in the use of Computer Numerical Control (CNC) and Computer Aided Drafting/Computer Assisted Manufacturing (CAD/CAM) to produce various types of molds for the metal, packaging, sealing, plastic, forging, and diecasting industries. The students will create and verify toolpaths by using computer simulation and will then send the data to a CNC machine tool for first article machining.

**MTT 100**
**MACHINE TOOL INTRODUCTION**
2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed as a survey of machine tool technology and introduction to computerized controls. It will include the computer as a control mechanism in the modern machine shop and also stress traditional machine tool technologies. It includes set-up and operation of basic machine tools, speeds and feeds, measurements, and introduction to the theory of computer numerical control. This course is required for Computer Numerical Control majors and other designated technology programs.
Transfer Credit: CSU

**MTT 154**
**CNC PROGRAM OPTIMIZATION**
2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: MTT 51 or MTT 76 and MTT 170 or appropriate work experience.
This course is designed to provide the student with the skills required to optimize Computer Numerical Control (CNC) programs and operations. The student will learn how to get the most out of CNC machine tools by increasing equipment utilization and decreasing equipment downtime. Course work also includes CNC program verification, optimization, and related service and maintenance issues.
Transfer Credit: CSU

**MTT 170**
**COMPUTER NUMERICAL CONTROL PROGRAMMING**
2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This course includes numerical control programming as applied to machine tools including a description of control systems and the capabilities of each. Students will develop CNC machine tool programs used to make manufactured parts. Computers will be used to input, develop and proof CNC programs. This course is for the student who desires to be a machine tool operator, programmer, or who will be employed in related fields.
Transfer Credit: CSU

**MTT 177**
**ADVANCED GIBBSCAM CAD/CAM**
2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MTT 76 or equivalent with a grade of Credit or “C” or higher or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course prepares students to operate the GibbsCam Programming System in conjunction with various multi-axis Computer Numerical Control (CNC) machinery. Students learn how to construct and import 3D models and create surface and solid models from engineering geometry. Other topics include tool paths from 3D models, post processing data for specific CNC machinery, and mold cores and cavities.
Transfer Credit: CSU

**MTT 278**
**MASTERCAM ADVANCED**
3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: MTT 51 with a grade of Credit or “C” or higher or appropriate work experience.
This course advances the student’s skill in the development of 3D surface models, solids and tool paths using MasterCAM. Students learn to create swept, ruled, revolved, Coons, draft, trimmed, and lofted surfaces using parametric and NURBS methodology. Basic and advanced solids modeling is fully incorporated into this class. Modification of geometry/toolpath using parametric hooks will be emphasized.
Transfer Credit: CSU

**MANUFACTURING TECHNOLOGY**
(Technology Division)

**MF GT 50**
**HAZ-MAT**
1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is a survey of the knowledge and skills that allow a person to work with hazardous materials in compliance with governmental regulations while at the same time to protect human health and the environment. Specific examples will include industry specific compliance, regulations, and controls. This includes an introduction to Material Safety Data Sheets (MSDS) and basic materials handling as is typical in local industries.

**MF GT 43/44** (Not degree applicable)
**MANUFACTURING TECHNOLOGY OCCUPATIONAL WORK EXPERIENCE**
3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Manufacturing Technology work experience 73 or 20 hours of employment per week for Manufacturing Technology work experience 74. The employment must be in a job related to the student’s educational goal.
Corequisite: (1) Enrollment in the Manufacturing Technology vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Manufacturing Technology students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 4 times.

**MF GT 51**
**INTRODUCTION TO COMPUTER INTEGRATED MANUFACTURING (CIM)**
3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course examines the relationships between management, design, and manufacturing of a product. Students will be introduced to the multi-faceted operations of the manufacturing industry. Case studies and demonstrations will be used to explore the development and implementation of an automated factory. This course is not open to students who have received credit in BCIS 46.

**MF GT 52**
**INTRODUCTION TO LASER CUTTING TECHNOLOGY**
2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This introductory laser cutting technology class will cover a variety of subjects, starting with an explanation of the laser itself and...
its history. Discussions will be held on the interface of a laser with material movement system, the different types of systems in the field, and the process required to process materials. Demonstrations and visitation(s) to local industry sites are included.

**MFGT 53**

**STATISTICAL PROCESS CONTROL (SPC)**

Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: TM 50 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

This technical course is for quality assurance personnel interested in applying statistical process control concepts. Materials covered include statistical methods for use in quantitative approaches to quality assurance and reliability including basic algebraic notation and formulation, functions, graphical analysis, probability laws, measures of central tendency and dispersion, frequency distributions, sampling plans and risks, control charts, and process capability studies.

**MFGT 54**

**ULTRASONIC LEVEL I TESTING**

Class hours: 1.8 lecture/.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course provides students with background knowledge in the operation of basic ultrasonic testing equipment. Skill development required in understanding and operating basic ultrasonic testing equipment for the inspection of composite and metallic components is emphasized.

**MFGT 55**

**QUALITY CONTROL (QC)**

Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course provides basic and comprehensive details of quality control concepts for those new to or already in the manufacturing field. Areas covered include quality costs, product liability, reliability and acceptance sampling. Techniques of using production charts, graphs and tables are covered to emphasize quality improvement with manufacturing sampling. Actual case studies and current manufacturing quality issues and concerns will be studies. Related terms and methods of Quality Assurance (QA), Total Quality Management (TQM), International Standards Organization (ISO) 9000 quality standards, Statistical Process Control (SPC), just in time (JIT) as well as other quality tools will be outlined and identified.

**MFGT 56**

**ISO 9000 QUALITY STANDARDS**

Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This survey course is a study of ISO 9000, the quality standard established by the International Standard Organization, as it applies to the manufacturing industry. Materials covered will include the ISO 9000 documents and selected references on the topic. Special emphasis will be placed on the advantages of implementing an ISO 9000 Quality System in an industrial manufacturing environment.

**MFGT 57**

**TOTAL QUALITY MANAGEMENT (TQM)**

Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This survey course examines the nature and application in manufacturing of Total Quality Management (TQM) in today’s competitive environment. Students will be introduced to basic concepts of quality and why its philosophy of continuous improvement will provide the framework for production systems. The “team” approach at all facets in quality of production within the industry is examined.

**MFGT 58**

**BENCHMARKING**

Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This survey course is designed for manufacturing individuals interested or actively involved in designing and conducting experiments. The course will help production and engineering personnel analyze a process and determine process variables that effect product characteristics. The development of efficient and economical test methods will cause reduction in variations of a product or process thus improving the production efficiency. Emphasis will be placed on Design of Experiments fundamentals.

**MFGT 59**

**DESIGN OF EXPERIMENTS (DOE)**

Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This survey course is designed for manufacturing individuals interested or actively involved in designing and conducting experiments. The course will help production and engineering personnel analyze a process and determine process variables that effect product characteristics. The development of efficient and economical test methods will cause reduction in variations of a product or process thus improving the production efficiency. Emphasis will be placed on Design of Experiments fundamentals.

**MFGT 60**

**QUALITY ASSURANCE PRINCIPLES**

Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course is an overview of quality control systems, organizational structure, quality costs, vendor relations, acceptance sampling, and customer relations. Emphasis will be placed on the importance of adequate product requirements.

**MFGT 100**

**MANUFACTURING PROCESSES**

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course provides information on modern manufacturing processes and operations including process materials currently used in industry.

*Transfer Credit: CSU*

**MATHEMATICS**

(Science/Engineering/Math Division)

(For additional courses see Technical Mathematics)

**MATH 5**

**MATHEMATICS LEARNING STRATEGIES**

Class hours: 1 lecture
Prerequisite: None.
Corequisite: Concurrent enrolment in MATH 20, MATH 40, MATH 60, MATH 80, MATH 80A, or MATH 80B.
Recommendation: None.

This course is designed to assist the student in developing learning skills and study habits that are important for all college level course work. Emphasis will be placed on those learning skills and study habits that are unique to the study of mathematics. This student will develop quantitative literacy by practicing arithmetic and algebraic structures including but not limited to “mathematical...
facts,” number sense and number theory, proportional reasoning including rational expressions and equations, and the real number system and its properties. Additional topics related to the development of learning skills and study habits may include affective factors influencing learning styles and the study of mathematics, effective management of classroom learning and personal study habits, problem-solving and reasoning skills, test preparation and test-taking strategies, appropriate use of technology, and support services for students of mathematics. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 3 times.

**MATH 20 (Not degree applicable)**

**BASIC MATHEMATICS**

Class hours: 3 lecture
Prerequisite: None.
This course includes a review of the basic mathematics skills and fundamental operations as applied to whole numbers, common fractions, decimal fractions, percentage, and ratios. This course is offered on a Credit/No Credit basis. This class may be taken in Programmed Learning Sections. See your counselor for details.

**MATH 40 (Not degree applicable)**

**PRE-ALGEBRA**

Class hours: 4 lecture
Prerequisite: MATH 20 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the Math Placement Process. This course covers topics in pre algebra, informal geometry, and applied arithmetic including but not limited to percent, rates, scientific notation, tables, graphs, the real number line, an introduction to the Cartesian Coordinate system, problem solving techniques, signed numbers, simplifying and evaluating expressions and formulas, solving simple equations, numerical relationships involving lines, angles and polygons. This course is offered on a Credit/No Credit basis.

**MATH 42 (Not degree applicable)**

**FOUNDATIONS IN APPLIED MATHEMATICS**

Class hours: 4 lecture/1 lab
Prerequisite: MATH 20 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the Math Placement Process. Corequisite: None. Recommendation: None. This course investigates topics in pre-algebra and informal geometry from an applications perspective. It emphasizes the use of calculators, problem solving techniques, measurement, formulas, graphs, charts and tables, data collection, probability and statistics, ratios and proportions, scale drawing, as they apply to various careers and technical occupations in business and industry. It will include hands-on lab activities. This course will satisfy the prerequisite for entry into MATH 60. (This course is not open to students with credit in MATH 40.)

**MATH 60**

**ELEMENTARY ALGEBRA**

Class hours: 4 lecture
Prerequisite: MATH 40 or MATH 42 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the Math Placement Process.
This course is designed for students with a deficiency in high school algebra. Topics included are: real numbers, polynomials, rational expressions, first-degree equations and inequalities, graphs of equations, linear systems of equations, exponents and radicals, and quadratic equations.

**MATH 70**

**PLANE GEOMETRY**

Class hours: 4 lecture
Prerequisite: MATH 60 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the Math Placement Process.
This course includes the study of triangles, quadrilaterals, circles, parallels, and similar figures. Skill development involving equalities, proportions, and areas of the above figures is included. Logical thinking is stressed in problem solutions. This course is designed for students who have not taken high school plane geometry.

**MATH 80**

**INTERMEDIATE ALGEBRA**

Class hours: 4 lecture
Prerequisite: MATH 60 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the Math Placement Process.
This course explores the representation of functions and relations as graphs, formulas, and tables. The types of functions studied will include linear, quadratic, polynomial, rational, exponential, and logarithmic. These functions will be used in solving a variety of equations, systems of equations and application problems. Other topics include: the algebra of real and complex numbers, inequalities, and an introduction to conic sections. (This course is not open to students with credit in MATH 80A or MATH 80B)

**MATH 80A**

**INTERMEDIATE ALGEBRA I**

Class hours: 3 lecture
Prerequisite: MATH 60 or equivalent with a grade of Credit or “C” or higher.
Students who have not taken MATH 60 must attain a satisfactory score on the Intermediate Algebra Readiness Test. This course is the first half of Intermediate Algebra. Topics include: the real number system, linear and quadratic equations, inequalities, exponents and polynomials, rational expressions, radical expressions and radicals, and graphing linear equations.

**MATH 80B**

**INTERMEDIATE ALGEBRA II**

Class hours: 3 lecture
Prerequisite: MATH 80A or equivalent with a grade of Credit or “C” or higher.
This course is the second half of Intermediate Algebra. Topics include: systems of equations, relations and functions, exponential and logarithmic functions, conic sections, and sequences and series.

**MATH 90A**

**TRAINING FOR TUTORS OF MATHEMATICS I**

Class hours: 2 lecture
Prerequisite: MATH 140 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in any mathematics course. This course is intended to prepare students to be individual and/or group tutors and to be mentor tutors in a program of supervised mathematics tutoring. Course topics include an introduction to learning theory, communication skills useful to mathematics tutors, attitudinal and cognitive roadblocks to student learning, and student success strategies to assist tutees to improve their study habits and time management skills. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 2 times.

**MATH 90B**

**TRAINING FOR TUTORS OF MATHEMATICS II**

Class hours: 2 lecture
Prerequisite: MATH 90A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: Concurrent enrollment in any mathematics course. This course is a continuation of MATH 90A. It prepares students to be individual and/or group tutors in mathematics and to be mentor tutors in a program of supervised mathematics tutoring. Students will focus on the methods...
of tutoring mathematics students enrolled in lower division mathematics courses. Course topics include tutoring responsibilities and ethics, principles of tutoring, appropriate tutoring techniques, and a discussion of common mathematical structures found in lower division mathematics courses. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 2 times.

MATH 100 (CAN MATH 2) 
LIBERAL ARTS MATHEMATICS 3 UNITS
Class hours: 3 lecture
Prerequisite: MATH 80 (or MATH 80B) and MATH 70 or equivalent with grades of Credit or “C” or higher.
This is a nontechnical course surveying a variety of concepts in mathematics. Topics will include: elementary logic, algebra of sets, rational and real numbers, informal geometry, elementary combinatorics and probability, and elementary statistics. It is not open to student with credit in any transfer level math course. Transfer Credit: CSU; UC

MATH 105 
ACTIVITY-BASED PROBABILITY AND STATISTICS FOR ELEMENTARY AND MIDDLE SCHOOL TEACHERS 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: MATH 70, MATH 80 OR MATH 80B or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course will emphasize activities-based explorations of randomization, data representation, measures of central tendency, and dispersion. Coursework includes combinations, basic probability, and analysis of experiments requiring hypothesizing, experimental design and data gathering. Algebraic thinking will be used throughout the course.
Transfer Credit: CSU

MATH 110A (CAN MATH 4) 
MATHEMATICS FOR ELEMENTARY TEACHERS 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: MATH 80 (or MATH 80B) and MATH 70 or equivalent with grades of Credit or “C” or higher.
This course is an introduction to problem solving processes and strategies. Topics will include the development and analysis of the structure of and operations on the real number system and concept and process development using appropriate models, technology, manipulatives and activities. It meets elementary education credential requirements. It is not open for credit to math majors.
Transfer Credit: CSU; UC*
*UC credit limits may apply. MATH 110A and MATH 110B combined: maximum credit, one course.

MATH 110B 
MATHEMATICS FOR ELEMENTARY TEACHERS 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: MATH 110A or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of MATH 110A. Emphasis will be problem solving with a focus on making tables and patterning, informal geometry, congruence similarity, constructions, transformations, tessellations, and measurement involving both English and Metric units in 1, 2, and 3 dimensions. Computer explorations will be integrated into the course. The course will also emphasize hands-on modeling of real-world geometric situations. It meets elementary education credential requirements. It is not open for credit to math majors.
Transfer Credit: CSU, UC*
*UC credit limits may apply. MATH 110A and MATH 110B combined: maximum credit, one course.

MATH 112 (CAN STAT 2) 
ELEMENTARY STATISTICS 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit of “C” or higher.
This course provides an introduction to descriptive and inferential statistics. Topics included are mean, standard deviation, variance, probability, random variables, binomial probability distribution, normal probability distribution, central limit theorem, testing hypotheses, confidence intervals, t-distribution, chi-square distribution, F-distribution, linear regression, and linear correlation. This course includes: elementary logic, algebra of sets, systems of linear equations, exponential, and logarithmic functions and inequalities, polynomial, rational, and logarithmic functions and their graphs, systems of linear equations, matrices, sequences and series, combinatorics, and the Binomial Theorem.
Transfer Credit: CSU; UC*
*UC credit limits may apply. MATH 114 and MATH 150 combined: maximum credit, one course.

MATH 115 (CAN MATH 12) 
FINITE MATHEMATICS 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit of “C” or higher. Students who have not taken MATH 80 or MATH 80B must attain a satisfactory score on the Advanced Math Readiness Test.
This course includes sets, matrices, system of equations and inequities, linear programming, permutations and combinations probability and topics from statistics. Applications of various topics from business, social and behavioral sciences are included.
Transfer Credit: CSU; UC

MATH 116 (CAN MATH 34) 
CALCULUS FOR MANAGERIAL, BIOLOGICAL AND SOCIAL SCIENCES 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 114 or equivalent with a grade of Credit of “C” or higher.
This course is a survey of calculus designed to meet lower division university and four- year college requirements for the management, biological or social science major student. Topics included are differentiation and integration of algebraic, logarithmic and exponential functions of single and multi-variables, related rates, areas, and curve sketching. This course is not open to students with credit in MATH 170. The class does not meet the prerequisite for Mathematics 190.
Transfer Credit: CSU; UC*
*UC credit limits may apply. MATH 116 and MATH 170 combined: maximum credit, one course.

MATH 140 (CAN MATH 8) 
TRIGONOMETRY 3 UNITS
Class hours: 3 lecture
Prerequisite: MATH 80 or MATH 80B and MATH 70 or equivalent with grades of Credit or “C” or higher. Students who have not taken MATH 80 or MATH 80B must attain a satisfactory score on the Advanced Math Readiness Test.
This course includes circular functions, inverses, graphs, angles and trigonometric functions, solutions of right and oblique triangles, identities, solution of equations, and complex numbers. This class may be taken in Programmed Learning Sections. See your counselor for details.

Transfer Credit: CSU

MATH 150 (CAN MATH 16) PRECALCULUS MATHEMATICS 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 140 or equivalent with a grade of Credit or "C" or higher.
Entering students must attain a satisfactory score on the Calculus Readiness Test.
This course is a critical study of the algebra of real and complex numbers which includes selected topics such as the number system, inequalities, and the binomial theorem, sets, matrices, sequences and series. Exponential, logarithmic, polynomial and inverse functions are included.
Transfer Credit: CSU; UC
*UC credit limits may apply. MATH 114 and MATH 150 combined: maximum credit, one course.

MATH 150A COMPUTER APPLICATIONS FOR PRECALCULUS 1 UNIT
Class hours: 3 lab
Prerequisite: MATH 150 or equivalent with a grade of Credit or "C" or higher, or concurrent enrollment.
Corequisite: None.
Recommendation: None.
This course is an introduction to modern mathematical software commonly used in universities and industry. The topics will be specifically selected to enhance Calculus I using the powerful numeric, symbolic and graphical capabilities of mathematical software that is currently available.
Transfer Credit: CSU

MATH 170 (CAN MATH SEQ B) (CAN MATH SEQ C)
ANALYTIC GEOMETRY AND CALCULUS I 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 150 or equivalent with a grade of Credit or "C" or higher.
Students who have not taken MATH 150 must attain a satisfactory score on the Calculus Readiness Test.
This course is the first semester of calculus, designed to meet lower division university and four-year college requirements. Topics included are differentiation and integration of algebraic, and trigonometric functions with applications. The necessary topics of analytic geometry are presented as needed to proceed with the principles of calculus.
Transfer Credit: CSU; UC

MATH 170A COMPUTER APPLICATIONS FOR CALCULUS I 1 UNIT
Class hours: 3 lab
Prerequisite: MATH 170 or equivalent with a grade of Credit or "C" or higher or concurrent enrollment.
Corequisite: None.
Recommendation: None.
This course is an introduction to modern mathematical software as used in most universities and in industrial applications where scientific research is commonplace. The topics will be specifically selected to enhance Calculus I using the powerful numeric, symbolic and graphical capabilities of mathematical software that is currently available.
Transfer Credit: CSU

MATH 190 (CAN MATH SEQ B) (CAN MATH SEQ C)
ANALYTIC GEOMETRY AND CALCULUS II 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 170 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of MATH 170. Topics include analytic geometry of the plane, differentiation and integration of trigonometric, logarithmic, and exponential functions, techniques of integration with applications, sequences, series, and improper integrals.
Transfer Credit: CSU; UC

MATH 190A COMPUTER APPLICATIONS FOR CALCULUS II 1 UNIT
Class hours: 3 lab
Prerequisite: MATH 190 or equivalent with a grade of Credit or "C" or higher, or concurrent enrollment.
Corequisite: None.
Recommendation: None.
This course is an introduction to modern mathematical software commonly used in universities and industry. The topics will be specifically selected to enhance Calculus II using the powerful numeric, symbolic, and graphical capabilities of the mathematical software.
Transfer Credit: CSU; UC

MATH 220 (CAN MATH 22) (CAN MATH SEQ C)
ANALYTIC GEOMETRY AND CALCULUS III 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 190 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of MATH 190. Topics include vectors and vector calculus, solid analytic geometry, functions of two or more variables, partial derivatives and multiple integration.
Transfer Credit: CSU; UC

MATH 240 (CAN MATH 24)
CALCULUS AND DIFFERENTIAL EQUATIONS 4 UNITS
Class hours: 4 lecture
Prerequisite: MATH 190 or equivalent with a grade of Credit or "C" or higher.
This course is a continuation of MATH 220 or equivalent with a grade of Credit or "C" or higher.
Topics in the course are standard methods of solving ordinary linear differential equations with applications. Laplace transforms including techniques of solving differential equations with Laplace transforms, matrices, and determinants including solving systems of linear equations with the Gauss elimination technique and Cramer’s Rule. This course is designed for engineering majors.
Transfer Credit: CSU; UC

NON-CREDIT (ADULT EDUCATION) CLASS

AED 90.91 (Not degree applicable)
SUPERVISED MATHEMATICS TUTORIAL 0 UNIT
Class hours: 2 lab
Open entry/open exit
Corequisite: Enrollment in any Mathematics course.
This course is designed to facilitate the learning of mathematical knowledge, skills, and concepts through individualized and mediated instruction. It is open to any student enrolled in any mathematics course. (Formerly MATH 91)

MEDICAL ASSISTANT
(Health Occupations Division)

MA 60 INTRODUCTION TO MEDICAL ASSISTING 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This is an introductory course to study the history of medicine and paramedical professions. Generalized and specialized careers in medical assisting, personal and professional responsibilities, medical ethics and law, communications and records are discussed. The focus is on front office responsibilities, customer service philosophy, and basic communication skills.

MA 62A
HEALTH INSURANCE AND BILLING 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Recommendation: MA 161 or equivalent with a grade of Credit or “C” or higher.
This course presents principles of insurance, general health and accident insurance programs and billing procedures, government medical care programs with specialized billing procedures, role of the insurance officer, and aspects of related medical professional liability. (This course is not open to students who have received credit for MA 62.)

MA 62B
ICD-9 AND CPT CODING 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: MA 62A and MA 161 or equivalent with grades of Credit or “C” or higher.
This course presents the International Classification of Diseases, 9th revision (ICD-9-CM) Current Procedural Terminology (CPT) coding process utilized for health care reimbursement. Specialized billing procedures for government medical care, role of the coder, and aspects of related medical professional liability will be presented.

MA 64
MEDICAL OFFICE ASSISTING 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course includes instruction in developing skills and techniques in the assisting of physical examinations, naming, care and setting-up of instruments, sterilization, and operating room procedures.

MA 66
MEDICATIONS AND SPECIALITIES 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course prepares the student to prepare and administer medications, maintain narcotic control records, and assist the specialist with examinations. This course meets the requirements as set forth in the laws relating to the utilization of medical assistants within the Medical Practice Act.

MA 67
MEDICAL OFFICE ADMINISTRATION 3 UNITS
Class hours: 3 lecture
Prerequisite: MA 60.
Recommendation: BCOT 62, and BCOT 3T, or equivalent with grades of Credit or “C” or higher.
This course is designed to develop skills in administrative procedures in the medical office. Topics include telecommunications; bookkeeping, billing and collections; payroll; policy and procedure development; medical records; verbal and written communication for the medical office; counseling employees, and additional office management techniques. Focus is placed on the manager’s perspective.

MA 68
MEDICAL ASSISTING INTERNSHIP EXPERIENCE 4 UNITS
Class hours: 1 lecture/180 variable semester hours
Prerequisite: MA 60, 62, 64, 161, HO 53, 54 and HO 55 or equivalent with grades of Credit or “C” or higher.
Corequisite: MA 66 and MA 67 or prior completion with a grade of Credit or “C” or higher.
This course is designed to provide opportunities for the student to intern a medical facility while receiving supervised instruction in direct patient care.

MA 73/74
MEDICAL ASSISTANT OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Medical Assistant work experience 73 or 20 hours of employment per week for Medical Assistant work experience 74. The employment must be in a job related to the student’s educational goal.
Prerequisite: MA 60, MA 62, MA 64, MA 161, HO 53, HO 54 and HO 55 or equivalent with grades of Credit or “C” or higher.
Corequisite: Enrollment in the Medical Assistant vocational program with 7 or more units including occupational work experience. MA 66 and MA 67 or prior completion with a grade of Credit or “C” or higher.
Occupational Work Experience is a supervised employment program in an approved work station related to the student’s declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. This course may be taken a maximum of 4 times based on the number of hours on the job.

MA 161
MEDICAL TERMINOLOGY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course will prepare the student in the correct use of medical terms, abbreviations, phraseology, and the understanding of word parts. It will include analyzing the terms by written and oral communication of the various systems of the body.
Transfer Credit: CSU

METALLURGY AND MATERIALS SCIENCE
(Technology Division)

MET 50
NONFERROUS HEAT TREAT 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Recommendation: MET 100A or equivalent with a grade of Credit or “C” or higher.
This course will cover the effects of heat treating related to the mechanical and physical properties of non-ferrous metals. Techniques, processes and equipment used in the industrial heat treating facility; relationship of metallic phases and precipitation hardening will be emphasized. In addition theory and application of thermocouples in pyrometry, photomicrography and photomacrography of the effects of heat treatment on microstructures are included.

MET 50A
HEAT TREATING FERROUS MATERIALS 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: MET 100A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course will include select heat treat specifications for the processing of ferrous materials to meet ARP 1962 requirements for heat treating. The course will cover the following: MIL-Q-9895, MIL-Std 1535, MIL-H-6875, AMS 2759, MIL-S-6090, and MIL-Std 12515.

MET 51
WELDING METALLURGY 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: WELD 100 or equivalent or employment in the metal joining industries. This course is an introduction to the study of metals with an emphasis on the effects of welding on metals. The course is applicable for those students seeking a career in welding inspection. The structure of matter, chemical, physical, and mechanical properties of metals, principles of alloying, solid state diffusion, plastic deformation, and heat treatment will be studied. The course will include demonstrations and exercises in the use of metallurgical testing equipment and tools found in the industry.

**MET 52L**  
**METALLURGY SPECIALTY LAB 0.5 UNIT**  
Class hours: 1.5 lab  
Prerequisite: None  
Corequisite: None  
Recommendation: None.  
This is a lab course to complement other courses in the metallurgy curriculum. It is designed to give the student practical laboratory experience in working with ferrous and nonferrous metals. This course may be taken a maximum of 4 times.

**MET 53**  
**FERROUS METALLURGY 3 UNITS**  
Class hours: 2.5 lecture/1.5 lab  
Prerequisite: MET 100A or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This is the study of the entire spectrum of steel and alloy steels. Theory and application in the fields of automotive, construction, aircraft metals, manufacturing and their processes will be covered. In addition, high temperature, heat resistant, corrosion resisting, stainless steel, specialty steels and tool steel will be discussed. The course will also cover testing methods such as metallurgical processing affecting microstructure, physical and mechanical properties including selection of steel types for specific applications, toughness, hardness, strength and heat treatment.

**MET 54**  
**NONFERROUS METALLURGY 3 UNITS**  
Class hours: 2.5 lecture/1.5 lab  
Prerequisite: MET 100A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.  
Corequisite: None.  
Recommendation: None.  
This course is the study of nonferrous metals and alloys. Theory and applications in the field of automotive, corrosion, manufacturing and aircraft metals and their processes will be covered. Materials covered will include titanium, aluminum, brass, bronze, copper, zinc, tin, lead, magnesium, tantalum, tungsten, niobium, molybdenum, platinum, gold and silver. Emphasis will be placed on the study of properties, fabrication, testing, castings, forgings, powder metals and the unique applications of each material. The metallurgical characteristics and selection of nonferrous types for specific applications will be emphasized.

**MET 55**  
**LABORATORY PROCEDURES 1 UNIT**  
Class hours: 1 lecture/1 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course will provide instruction in the elements of laboratory procedures of metals. Instruction will include the laboratory procedures used to determine the interpretive concepts of the quality and properties of metals and their alloys, with emphasis placed on the proper use and care of laboratory equipment, hardness testers, abrasive cut-off wheels, mounting presses, tensile testers and polishing equipment used in industry.

**MET 56**  
**SURVEY OF NONFERROUS HEAT TREAT 1.5 UNITS**  
Class hours: 1.5 lecture/0.5 lab  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course introduces the student to the effects of heat treating as related to the mechanical and physical properties of nonferrous metals. Laboratory testing, including the techniques, processes and equipment used in the industrial heat treating facility, relationship of metallic phases, and precipitation hardening will be emphasized. Theory and application of photomicrography, photomacrophography, and the effects of heat treatment on microstructures are included.

**MET 61**  
**RADIOGRAPHY LEVEL I TESTING 3 UNITS**  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: None.  
This course provides students with background knowledge in the theory and demonstration of basic radiography testing equipment. Skill development required in understanding and operating basic radiography testing equipment for the inspection of composite and metallic components is emphasized.

**MET 73/74**  
**METALLURGY OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS**  
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Metallurgy work experience 73 or 20 hours of employment per week for Metallurgy work experience 74. The employment must be in a job related to the student’s educational goal.  
Corequisite: (1) Enrollment in the Metallurgy vocational program with 7 or more units including occupational work experience.  
Work experience/career internship provides the opportunity for Metallurgy students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 4 times.

**MET 100A**  
**METALLURGY I 3 UNITS**  
Class hours: 3 lecture/1 lab  
Prerequisite: None.  
This course is an introduction to the study of metals and non-metals; structure of matter; chemical, physical and mechanical properties of metals and alloys; and non-metals including polymers, ceramics and composite materials. Principles of alloying, solid state allotropy, plastic deformation and heat treatment will also be studied. The course will also include demonstrations and laboratory practice in the use of metallurgical testing equipment commonly used in industry.  
Transfer Credit: CSU

**MET 100B**  
**METALLURGY II 2.5 UNITS**  
Class hours: 2 lecture/2 lab  
Prerequisite: MET 100A or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.  
Corequisite: None.  
Recommendation: None.  
This course is designed to further student’s skills in the study of the select spectrum of ferrous and nonferrous alloys, such as steel, steel alloys, copper alloys, nickel alloys, titanium and aluminum. Emphasis will be placed on the application of metallurgy principles, properties and laboratory practices.  
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
MET 120
NON-DESTRUCTIVE TESTING 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
This is a survey course designed to familiarize the student with nondestructive testing theory and applications. The major emphasis is on the “basic five” nondestructive testing methods: liquid penetrant, magnetic particle, radiographic, ultrasonic, and eddy current. Students will learn to use these methods and to evaluate available NDT methods as they apply to quality control.
Transfer Credit: CSU

MET 130A
HEAT TREATMENT OF IRON AND STEEL 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: MET 100A or equivalent with a grade of Credit or “C” or higher.
Effects of heat treating on mechanical and physical properties of ferrous metals will be covered. Techniques, processes and equipment used in the industrial heat treating facility are included in this course. Processes and effects of specialized surface treatments, theory and application of thermocouples in pyrometry, photomicrography and photomacrography of the effects of heat treatment on microstructures are all part of lecture and lab assignments.
Transfer Credit: CSU

MICROBIOLOGY
(Science/Engineering/Math Division)

MICR 200 5 UNITS
PRINCIPLES AND APPLICATIONS OF MICROBIOLOGY (CAN BIOL 14)
Class hours: 3 lecture/6 lab
Prerequisite: CHEM 100 or BIOL 120 or ZOOL 120 or equivalent with grades of Credit or “C” or higher.
Through lecture and laboratory exercises, this course provides an introduction to the microbial world. Emphasis is on microbial structure, microbial genetics, host-microbe interactions, the immune response, and disease control/prevention. Current issues in acquired immune deficiency syndrome research and recombinant deoxyribonucleic acid technology are discussed. Laboratory exercises will emphasize microbial morphology and identification through microscopic observation and biochemical testing. This course satisfies the requirements of majors in two and four-year nursing programs, dental hygiene, and is recommended for pre-professional biology majors.
Transfer Credit: CSU; UC

MULTIMEDIA

SEE ART
(Art and Design)

MUSIC
(Fine Arts/Communications Division)

MUS 2 (Not degree applicable)
COMMERCIAL MUSIC ORIENTATION 1 UNIT
Class hours: 1 lecture/2 lab
Prerequisite: None.
This course provides preparation for professional and semi-professional work as a commercial musician. It includes preparation for auditions, techniques in securing employment, basic knowledge required for practicing musicians, conduct and deportment on the job, how to improve one’s skills and correcting weaknesses in an individual’s qualifications as a practicing professional or semi-professional.

MUS 100 MUSIC APPRECIATION 3 UNITS
Class hours: 3 lecture, plus 1 hour lab arranged.
Prerequisite: None.
This course is an introductory survey of Western Art music from the Middle Ages to the present. Emphasis is on the historical, aesthetic, and cultural contexts from which music arises.
Transfer Credit: CSU; UC

MUS 101 INTRODUCTION TO WORLD MUSIC 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an introduction to world music. Emphasis is placed on understanding the substantive features of music as well as social, cultural, political, and economic factors that contribute to different musical traditions found throughout the world.
Transfer Credit: CSU; UC

MUS 102 LATINO MUSIC 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course offers students a historical and philosophical survey of Latino music. Musical expression will be discussed in terms of folk/ethic, popular and classical art forms. The cross-hybridization of musical styles will be addressed with respect to musical forms from Mexico, Cuba, Puerto Rico, and the Dominican Republic. The state of music among Latino populations in the United States also will be included.
Transfer Credit: CSU

MUS 103 JAZZ IN AMERICA 3 UNITS
Class hours: 3 lecture, plus 1 hour lab arranged.
Prerequisite: None.
This course is an introduction to jazz, its historical background and its development in the United States. 
Transfer Credit: CSU; UC

MUS 104 AMERICAN POPULAR MUSIC 3 UNITS
Class hours: 3 lecture, plus 1 hour lab arranged.
Prerequisite: None.
This course is a survey of the history and characteristics of the music developed in or for general American culture and various subcultures from the Revolutionary Period to the present. It includes folk music, blues, Swing-era music, rock ‘n’ roll, and rock.
Transfer Credit: CSU; UC

MUS 104B HISTORY OF ROCK MUSIC 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to rock and its influence on American popular music. The students will learn how to actively engage with music by relating rock to other styles of music, relating music to text, and relating rock to its cultural context.
Transfer Credit: CSU; UC

MUS 105 MUSIC FUNDAMENTALS 3 UNITS
Class hours: 3 lecture, plus 1 hour lab arranged.
Prerequisite: None.
This course provides the fundamentals of notation, meter, rhythm, intervals, and key signatures, so that the student can gain a sensitivity to, and understanding of, music past, present, and future.
Transfer Credit: CSU; UC
### MUS 106 (CAN MUS 2)
#### MUSIC THEORY I
**5 UNITS**
- **Class hours:** 5 lecture, plus 2 hours lab arranged
- **Prerequisite:** MUS 105 or equivalent with a grade of Credit or “C” or higher.
- **Corequisite:** None.
- This is a basic course in music theory and musicianship. Orientation is given in the basic elements of major and minor harmony, intervals, keys, triads, voice leading, non-harmonic tones, and seventh chords. Sight singing, ear training, keyboard harmony, melodic dictation, computer music software, computer literacy for musicians, and notation software will also be studied.
- **Transfer Credit:** CSU; UC

### MUS 108
#### MUSIC THEORY II
**5 UNITS**
- **Class hours:** 5 lecture, plus 2 hour lab arranged
- **Prerequisite:** MUS 106 or equivalent with a grade of Credit or “C” or higher.
- **Corequisite:** None.
- This is a course in music theory and musicianship dealing with Baroque and Classical harmony. Orientation is given in advanced four-part chorale writing, primary and secondary triads, modulation, inversion, dominant 7ths, and non-dominant seventh chords. Other topics to be covered are intermediate keyboard harmony and dictation, intermediate sight singing, chordal identification, diatonic and chromatic scale degrees, and chordal dictation involving secondary and dominant. There will be the continuing study and usage of music software, rhythm machines, and computer based notation programs.
- **Transfer Credit:** CSU; UC

### MUS 110
#### MUSIC THEORY III
**5 UNITS**
- **Class hours:** 5 lecture, plus 2 hour lab arranged
- **Prerequisite:** MUS 107 or equivalent with a grade of Credit or “C” or higher.
- **Corequisite:** None.
- This is a course in music theory and musicianship dealing with Classical and Romantic harmony. Attention is given in advanced four-part chorale writing, piano style writing, secondary triads, advanced modulation, inversion, dominant 7ths, non-dominant seventh chords, ninth chords, eleventh chords, and thirteenth chords. Other topics to be covered are advanced keyboard harmony and dictation, advanced chromatic scale degrees, and chordal dictation involving secondary dominants. There will be the continuing study and usage of music software, rhythm machines, and computer-based notation programs.
- **Transfer Credit:** CSU; UC

### MUS 109
#### MUSIC THEORY IV
**5 UNITS**
- **Class hours:** 5 lecture, plus 2 hour lab arranged
- **Prerequisite:** MUS 108 or equivalent with a grade of Credit or “C” or higher.
- **Corequisite:** None.
- This is a course in music theory and musicianship dealing with Romantic and 20th century harmony. Orientation is given in piano style writing, all chromatically altered chords, advanced modulation, inversion, non-dominant seventh chords, half and fully diminished 7ths, whole tone harmony, and elements of late Romanticism, Impressionism and the 20th century. Other topics to be covered are advanced keyboard harmony and dictation, advanced sight singing, advanced chordal identification, diatonic and chromatic scale degrees, and chordal dictation involving secondary dominants and chromatism. There will be the continuing study and usage of music software, rhythm machines, and computer-based notation programs.
- **Transfer Credit:** CSU; UC

### MUS 112
#### ELEMENTARY PIANO I
**2 UNITS**
- **Class hours:** 2 lecture/1 lab
- **Prerequisite:** MUS 105 or equivalent with a grade of Credit or “C” or higher.
- This course focuses on the continuation of vocal techniques including breath management, posture, phonation, resonance, and diction. A variety of elementary vocal repertoire is introduced from different musical styles: folk, classical, musical theater, and popular songs. Students learn to use the unamplified voice to its best advantage and to interpret and perform songs suited to their individual ability. A concentration on musicianship is emphasized using ear-training techniques. This course may be taken a maximum of 2 times.
- **Transfer Credit:** CSU; UC

### MUS 113
#### ELEMENTARY PIANO II
**2 UNITS**
- **Class hours:** 2 lecture/1 lab
- **Prerequisite:** MUS 112 or equivalent with a grade of Credit or “C” or higher.
- This course focuses on the continuation of vocal techniques including breath management, posture, phonation, resonance, and diction. A variety of intermediate vocal repertoire will be introduced from different musical styles: folk, classical, musical theater, and popular songs. Students learn to use the unamplified voice to its best advantage and to interpret and perform songs suited to their individual ability. A concentration on musicianship is emphasized using ear-training techniques. This course may be taken a maximum of 2 times.
- **Transfer Credit:** CSU; UC

### MUS 114
#### INTERMEDIATE PIANO I
**2 UNITS**
- **Class hours:** 2 lecture/1 lab
- **Prerequisite:** MUS 113 or equivalent with a grade of Credit or “C” or higher.
- This course is a continuation of piano study at the intermediate level. A variety of assigned piano repertoire will be studied. Emphasis will be on understanding, experiencing and appreciating more advanced aspects of keyboard musicianship. This course may be taken a maximum of 2 times.
- **Transfer Credit:** CSU; UC

### MUS 115
#### INTERMEDIATE PIANO II
**2 UNITS**
- **Class hours:** 2 lecture/1 lab
- **Prerequisite:** MUS 114 or equivalent with a grade of Credit or “C” or higher.
- This course is a continuation of piano study that occurred in MUS 114. A variety of assigned piano repertoire at the intermediate level will be studied. This course may be taken a maximum of 2 times.
- **Transfer Credit:** CSU; UC

### MUS 116
#### VOICE I
**2 UNITS**
- **Class hours:** 2 lecture/1 lab
- **Prerequisite:** MUS 114 or equivalent with a grade of Credit or “C” or higher.
- This course focuses on basic vocal techniques including breath management, posture, phonation, resonance, and diction. A variety of elementary vocal repertoire is introduced from different musical styles: folk, classical, musical theater, and popular songs. Students learn to use the unamplified voice to its best advantage and to interpret and perform songs suited to their individual ability. A concentration on musicianship is emphasized using ear-training techniques. This course may be taken a maximum of 2 times.
- **Transfer Credit:** CSU; UC

### MUS 117
#### VOICE II
**2 UNITS**
- **Class hours:** 2 lecture/1 lab
- **Prerequisite:** MUS 116 or equivalent with a grade of Credit or “C” or higher.
- This course focuses on a continuation of vocal techniques including breath management, posture, phonation, resonance, and diction. A variety of intermediate vocal repertoire will be introduced from different musical styles: folk, classical, musical theater, and popular songs. Students learn to use the unamplified voice to its best advantage and to interpret and perform songs suited to their individual ability. A concentration on musicianship is emphasized using ear-training techniques. This course may be taken a maximum of 2 times.
- **Transfer Credit:** CSU; UC
MUS 118
VOICE III  2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: MUS 117 or equivalent with a grade of Credit or "C" or higher.
This course emphasizes the technical foundations of singing learned in Voice I and II. The song literature is more advanced and requires an understanding of a broad range of styles as previously discussed in the earlier courses. Ear training and musicianship require specific reading and identification skills. Stylistic interpretation is focused on, as well as performance techniques. Greater involvement with microphone and recording techniques will be encouraged. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 119
VOICE IV  2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: MUS 118 or equivalent with a grade of Credit or "C" or higher.
The course continues the study of diction, style, technical musicianship, and interpretation that occurred in Voice III. Acting with emphasis on stage movement, characterization, and improvisational techniques are explored in greater detail. Singers will be required to perform solos, duets, and in scenes. Popular styles are required to collaborate with recording studio to create projects. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 120
ELEMENTARY GUITAR I  2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
This course provides basic instruction in classical and other styles of guitar playing at beginning level. It includes appropriate exercises to develop technical facility, material for sight reading, study of basic chords, and repertoire. The student must provide an acoustic guitar for his/her own use in the class. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 121
ELEMENTARY GUITAR II  2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: MUS 120 or equivalent with a grade of Credit or "C" or higher.
This class refines guitar-playing techniques used in elementary classical, flamenco, and other pieces. Elements of improvisation, harmonization, and playing in upper positions are included. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 122
INTERMEDIATE GUITAR I  2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: MUS 121 or equivalent with a grade of Credit or "C" or higher.
This class includes instruction in scales, chords, and arpeggios in all keys and positions. Included are intermediate levels of improvisation, accompanying, sight-reading, transposition, and the performance of folk, classical, and Flamenco styles. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 123
INTERMEDIATE GUITAR II  2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: MUS 122 or equivalent with a grade of Credit or "C" or higher or equivalent.
This class covers the mastery of the entire guitar fingerboard, a study of intermediate and advanced music in several styles, and the principles of improvisation and transposition. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 124
CONCERT BAND 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Audition.
Recommendation: None.
The concert band is dedicated to the performance of standard band literature. Emphasis will be placed upon the development of individual musicianship and fine ensemble performance and rehearsal techniques are studied. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 124A
BEGINNING BAND  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
The beginning band is dedicated to the performance of beginning band literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 125
COMMUNITY BAND 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Audition.
Recommendation: None.
The community band is dedicated to the performance of popular, family-oriented literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety will be studied with an emphasis on medleys, marches, and overtures. Ensemble performance and rehearsal techniques are studied. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 126
PEP BAND  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Recommendation: Music background preferred.
The Pep Band provides entertainment music before and during home football games in the fall season. Additional performances may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*

MUS 127
ORCHESTRA 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Audition.
Recommendation: None.
The orchestra is dedicated to the performance of standard orchestral literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical
compositions of a wide variety of styles will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.

MUS 128
COMMUNITY ORCHESTRA 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
The community orchestra course is dedicated to the performance of standard orchestral literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety of styles will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.

MUS 129
WOODWIND ENSEMBLE 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
This class provides each individual student the opportunity to learn and execute the principles of woodwind ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken a maximum of 4 times.

MUS 130
BRASS ENSEMBLE 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
This class provides each individual student the opportunity to learn and execute the principles of brass ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken a maximum of 4 times.

MUS 131
PERCUSSION ENSEMBLE 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
This class provides each individual student the opportunity to learn and execute the principles of percussion ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken a maximum of 4 times.

MUS 132
GUITAR ENSEMBLE 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: MUS 120 or equivalent with a grade of Credit or “C” or higher, or audition.
This course is designed for the student desiring to enter the fields of professional dance music, radio, or theatre orchestra work. Opportunity is provided for practical experience in organizing instrumental combinations of all kinds and sizes. Training is given in standard dance-band phrasing and improvisation. Nationally-known guest artists appear with the group, and opportunities are provided to make professionally-engineered recordings. This course may be taken a maximum of 4 times.

MUS 133
STAGE BAND 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Audition.
This course is designed for the student desiring to enter the fields of professional dance music, radio, or theatre orchestra work. Opportunity is provided for practical experience in organizing instrumental combinations of all kinds and sizes. Training is given in standard dance-band phrasing and improvisation. Nationally-known guest artists appear with the group, and opportunities are provided to make professionally-engineered recordings. This course may be taken a maximum of 4 times.

MUS 134
JAZZ ENSEMBLE 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Audition.
The community jazz ensemble is dedicated to the performance of standard jazz band literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety of styles will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.

MUS 135
THIS BUSINESS OF MUSIC 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Announcement of Courses

MUS 139  GOSPEL CHORUS  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This choral ensemble is designed for the student who has had little or no previous vocal experience. Emphasis will be placed upon the development of individual musicianship through the study of vocal concepts and repertoire. A variety of gospel styles ranging from traditional to contemporary will be studied and performed. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 140  POP CHOIR  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: By audition.
This choral ensemble is designed for the student who has had previous vocal experience. Emphasis will be placed upon the development of individual musicianship through the study of musical styles, vocal concepts and repertoire. A wide variety of music ranging from Broadway musicals to pop and jazz charts will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 141  POP/ROCK ENSEMBLE  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: Audition.
This course will provide the students an opportunity to learn and perform contemporary music with an emphasis on pop, rock, and Latin. Aspects to be considered will include style, repertoire, instrumentation, equipment, visual presentation, and management. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 142  JAZZ IMPROVISATION  1 UNIT
Class hours: 1 lecture/2 lab
Prerequisite: None.
Recommendation: Audition.
This course in basic techniques in improvisation begins with simple question-and-answer phrases and progresses to extended solos. It covers detailed and applied knowledge of chord progressions and stresses harmonic forms employed in all phases of jazz. Emphasis will be on the blues, 32-bar standards, and jazz pieces. Included are performance, analysis, listening, written improvisations, playing with records, and transcribed solo study. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 143  THE JAZZ AND POPULAR SINGER  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course focuses on the study of jazz and popular singing styles with emphasis on historical elements, stylistic concepts, theoretical practices, performance procedures, and its function within the music industry. Topics include harmony and ear training for jazz and popular singers, historical analysis of significant singers of this genre, small vocal group jazz ensemble, studio recording techniques, improvisation, solo stylization, ensemble sound concepts, and the study of popular literature. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 144  ELECTRONIC SYNTHESIZER I  2 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This class is an introduction to MIDI, synthesizer programming, sampling, computer sequencing, drum machine technique, and computer composition. Also, the course introduces the basics of acoustics and the physical properties of sound. Compositions will be required of all students. Individual studio time is provided. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

MUS 145  ELECTRONIC SYNTHESIZER II  1 UNIT
Class hours: 1 lecture/2 lab, plus 4 hours arranged.
Prerequisite: MUS 144 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of tape studio practices, digital recording, synthesizer performance, and computer based recording and processing. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

MUS 146  RECORDING TECHNIQUES  2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Recommendation: MUS 105 or equivalent
with a grade of Credit or “C” or higher.
This course introduces the student to the methods of audio recording for the performing arts. It includes the technical, as well as the artistic, aspects of recording. Emphasis will be placed on the practical use of audio equipment both in a studio situation and on location. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 147  BASIC APPLIED MUSIC  1 UNIT
Class hours: 1 lecture plus 6 hours arranged
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 125, 126, 127, 129, 132, 133, 134, 138, 139, 140 or 142.
This course offers individuals instruction in voice, piano, or band/orchestral instruments with an assigned instructor on the applied music staff. Emphasis will be placed on study at the beginning level of technique and repertoire. It includes one hour per week recital attendance and one half hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 148  PRIVATE STUDY/TECHNIQUE  1 UNIT
Class hours: 1 lecture plus 6 hours arranged
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 125, 126, 127, 132, 133, 134, 138, 139, 140 or 142.
This course offers individual instruction in voice, piano, band/orchestral instrument with an assigned instructor on the applied music staff. Emphasis will be placed on technique development at the intermediate level necessary to form stronger musical skills and technical facility. Includes one hour per week recital attendance and one-hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 149  PRIVATE STUDY/ MUSICAL PREPARATION  1 UNIT
Class hours: 1 lecture plus 6 hours arranged
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 125, 126, 127, 132, 133, 134, 138, 139, 140, or 142.
All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course offers individual instruction in voice, piano, or band/orchestral instruments with an assigned instructor on the applied music staff. Emphasis is on musical preparation of musical style and interpretation for the intermediate student. Repertoire will be representative of various periods and composers. It includes one hour per week recital attendance and one-hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

MUS 150 PRIVATE STUDY/ PERFORMANCE PRACTICE 1 UNIT
Class hours: 1 lecture plus 6 hours arranged
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 125, 126, 127, 132, 133, 134, 138, 139, 140, or 142
This course offers individuals instruction in voice, piano, or band/orchestral instruments with an assigned instructor on the applied music staff. Emphasis is on performance practice and continued study of advanced repertoire representative of various periods and composers. It includes one hour per week recital attendance and one-hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

MUS 151 PRIVATE STUDY/ RECITAL PREPARATION 1 UNIT
Class hours: 1 lecture plus 6 hours arranged
Prerequisite: None.
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124, 125, 126, 129, 130, 131, 132, 133, 134, 138, 139, 140, or 142
This course offers applied instruction in voice, piano, or traditional band or orchestral instrument with an assigned instructor on the applied music staff. Emphasis is placed on technique and repertoire representative of various periods and composers. It includes one hour per week recital attendance and one half hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

MUS 152 THE ART OF TEACHING BEGINNING PIANO 2 UNITS
Class hours: 2 lecture
Prerequisite: MUS 112 and MUS 105 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
The course introduces basic principles of successful piano teaching at the beginning level. Special problems encountered in teaching will be addressed. Emphasis will be placed on private and group piano teaching methods, personal development as a teacher and musician, analyzing and selecting appropriate literature, development of technique and reading ability in beginning level students.
Transfer Credit: CSU

MUS 153 THE ART OF TEACHING INTERMEDIATE PIANO 2 UNITS
Class hours: 2 lecture
Prerequisite: MUS 152 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
The course advances students' knowledge of principles and skills essential to teaching piano at the intermediate level. Emphasis will be on continued development of technique and reading ability in intermediate level students; private and group piano teaching methods; selection of intermediate literature; Baroque, Classical, Romantic and 20th century styles; studio organization and personal development as teacher and musician.
Transfer Credit: CSU

MUS 154 PIANO ENSEMBLE 1.5 UNITS
Class hours: 1 lecture/1.5 lab
Prerequisite: MUS 112 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course will survey various origins and history of piano ensemble repertoire. Emphasis on development of basic technical skill, sight reading, transposition, improvisation, correct harmonization of melodies with piano accompaniments, principles of accompanying soloists and ensemble playing. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 155 MARCHING BRASS ENSEMBLE 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
Corequisite: None.
Recommendation: None.
This course is designed for the brass student desiring to enter the field of marching music, education, studio, radio, and theatre orchestra work. Opportunity is provided for practical experience in organizing marching brass combinations of all styles and sizes. Training is given in standard marching brass phrasing and technique. Nationally known educators/clinicians will, at times, assist the group. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 156 MARCHING PAGEANT ENSEMBLE 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
Corequisite: None.
Recommendation: None.
This course is designed for the student desiring to enter the fields of professional percussion playing in studio, radio, and theatre orchestra work. Opportunity is provided for practical experience in organizing marching percussion combinations of all styles and sizes. Training is given in standard marching percussion phrasing and technique. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 157 THE ART OF TEACHING DRUM AND BUGLE CORPS 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
Corequisite: None.
Recommendation: None.
This course is designed for the student desiring to enter the fields of music and pageantry performance. Opportunity is provided for practical experience in organizing marching and pageantry combinations of all styles and sizes. Training is given in standard marching and maneuvering techniques. Nationally known educators/clinicians may assist with the group, and opportunities are provided to perform learned material. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 158 MARCHING PERCUSSION ENSEMBLE 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
Corequisite: None.
Recommendation: None.
This course is designed for the student desiring to enter the fields of professional percussion playing in studio, radio, and theatre orchestra work. Opportunity is provided for practical experience in organizing marching and pageantry combinations of all styles and sizes. Training is given in standard marching percussion phrasing and technique. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 159 MARCHING PERCUSSION ENSEMBLE 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
Corequisite: None.
Recommendation: None.
This course is designed for the student desiring to enter the fields of professional percussion playing in studio, radio, and theatre orchestra work. Opportunity is provided for practical experience in organizing marching and pageantry combinations of all styles and sizes. Training is given in standard marching percussion phrasing and technique. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 160 BEGINNING DRUM AND BUGLE CORPS 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Audition.
Corequisite: None.
Recommendation: None.
This course is designed for the student desiring to enter the fields of music and pageantry education and performance. Opportunities are provided for
practical experience in organizing marching and pageantry combinations of all styles and sizes. Training is given in standard drum and bugle corps format. Nationally known clinicians may assist with the group, and opportunities are provided to perform learned material. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

MUS 164 TOURING DRUM AND BUGLE CORPS 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will involve extensive touring on a local, regional, and national level. Opportunity is provided for practical experience in organizing marching and pageantry combinations of all styles and sizes. Training is given in standard Drum and Bugle Corps format. Nationally known educators/clinicians may assist with the group, and opportunities are provided to perform learned material. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

MUS 171 OCCUPATIONAL WORK EXPERIENCE IN MUSIC 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Occupational Work Experience in Music, in a declared Music major. One unit of Occupational Work Experience in Music requires 60 non-paid hours or 75 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the students/workers, the college, and the employers/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their approved projects are completed. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

MUS 244 DIGITAL AUDIO POST PRODUCTION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: MUS 144 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course covers the assembly of various audio elements (dialog, music and effects) into a play list for synchronization to picture. Non-linear digital video editing systems will be utilized to create finished programs for digital video, animation, television, and computer games. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

NURSING (Health Occupations Division)

NURSG 3 (Not degree applicable) PREPARING FOR NURSING 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course is designed for students planning to enter the nursing career. Content includes how to use time and other resources to become a successful nursing student. Overviews of nursing career options and educational pathways are presented, along with trends affecting nursing's future. Students are introduced to communication skills for use with a diverse student and patient population.

Transfer Credit: CSU

NURSG 25 (Not degree applicable) CLINICAL WORKSHOP 1 0.5 UNIT
Total semester hours: .25 lecture/1.75 lab
Prerequisite: Current license as a Licensed Psychiatric Technician or Licensed Vocational Nurse or completion of one or more nursing core courses in an approved/accredited nursing program.
Corequisite: None.
Recommendation: None.
The purpose of this course is to provide the nursing applicant with theoretical concepts and skill demonstration and practice related to clinical competency necessary for advanced placement students entering the first year of the nursing program. Included are assessment processes and individualized clinical skills required for patient care. The student must receive a grade of “C” or higher in the course component and a satisfactory grade in clinical lab to pass the course.

Transfer Credit: CSU

NRSG 26 (Not degree applicable) CLINICAL WORKSHOP 2 0.5 UNIT
Total semester hours: .25 lecture/1.75 lab
Prerequisite: Current license as a Licensed Psychiatric Technician or Licensed Vocational Nurse or completion of one or more nursing core courses in an approved/accredited nursing program.
Corequisite: None.
Recommendation: None.
The purpose of this course is to provide the nursing applicant with theoretical concepts and skill demonstration and practice related to clinical competency necessary for advanced placement students entering the second year of the nursing program. Included are assessment processes and individualized planning to assist the student in attaining the necessary level of skills competence to support success in the nursing program. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 3 times.

NRSG 200 PHARMACOLOGY FOR NURSES 2 UNITS
Class hours: 2 lecture
Prerequisite: A&P 150 and A&P 151 or equivalent with grades of Credit or “C” or higher.
This course introduces the student to the fundamentals of pharmacology as they relate to the nursing management of drug therapy. Prototype drugs, selected from the major drug classes, are used to illustrate important drug facts. Core drug knowledge is integrated with core patient knowledge to provide a framework for nursing management in drug therapy.

Transfer Credit: CSU

NRSG 210 FUNDAMENTALS OF NURSING 5 UNITS
Class hours: 3 lecture/6 lab
Prerequisite: Admission to Nursing Program.
Corequisite: NRSG 211 and NRSG 213A.
Recommendation: None.
The focus of this course is on the instruction of theory and beginning clinical application of the Nursing Process based on the Roy Adaptation Model and concepts related to the role of the Associate Degree Nurse as a Provider of Care for geriatric patients in long-term care settings. Emphasis is also placed on the beginning application of therapeutic communication techniques and the acquisition of fundamental concepts and skills required for patient care. The student must receive a grade of “C” or higher in the lecture component and a satisfactory grade in clinical lab to pass the course.

Transfer Credit: CSU
with core patient knowledge to provide a framework for nursing management in drug therapy.

**(Formerly NRSG 213)**

*Transfer Credit: CSU*

**NRSG 213B**

**MAJOR DRUGS AND NURSING MANAGEMENT II**

Class hours: 1 lecture
Pre requisite: NRSG 213A or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

This course continues the study of the fundamentals of pharmacology as it relates to the nursing management of drug therapy. Prototype drugs, selected from the major drug classes, are used to illustrate important drug facts. This course may be taken a maximum of 3 times.

*Transfer Credit: CSU*

**NRSG 215**

**ADVANCED PLACEMENT BRIDGE**

Class hours: 2 lecture
Pre requisite: An active LVN license or current enrollment in a vocational or registered nursing program or completion of one or more Associate Degree Nursing or Bachelor of Science in Nursing courses with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: Completion of READ 54, ENGL 52, and MATH 60 or equivalent with grades of Credit or “C” or higher or successful completion of the college placement process. This course introduces Licensed Vocational Nurses and students transferring from other nursing programs to the theoretical framework used in the Cerritos College Nursing Program. The roles of the Associate Degree Nurse as Provider of Care, Manager of Care, and Member of the Discipline of Nursing are surveyed. The Roy Adaptation Model for Nursing is taught as the basis for providing nursing care. Content also includes communication theory and application, client teaching concepts, assertion theory, and critical thinking foundational skills. Assessment of prior learning is used to guide individual students in preparing for advanced placement in the nursing program.

*Transfer Credit: CSU*

**NRSG 220**

**MEDICAL-SURGICAL NURSING 3**

Class hours: 3 lecture/7.5 lab
Pre requisite: NRSG 211, NRSG 212, NRSG 213A or equivalent with grades of Credit or “C” or higher. For Option B and E students: Admission to the Nursing Program.
Corequisite: Admission to the Nursing Program.

The focus of this course is on the theory and clinical application of the Nursing Process based on the Roy Adaptation Model and concepts related to the role of the Associate Degree Nurse as the Provider of Care for medical-surgical patients and patients with women's health disorders in acute care settings. The role of the nurse as Manager of Care is introduced. The student must receive a grade of “C” or higher in the lecture component and a satisfactory grade in clinical lab in order to pass the course.

*Transfer Credit: CSU*

**NRSG 222**

**MATERNAL/CHILD NURSING 5.5 UNITS**

Class hours: 3 lecture/7.5 lab
Pre requisite: NRSG 222 or equivalent with a grade of Credit or “C” or higher. For Option C, D, E and F students: Admission to the Nursing Program.

The focus of this course is on the theory and clinical application of the Nursing Process based on the Roy Adaptation Model and concepts related to the role of the Associate Degree Nurse in the care of clients in acute psychiatric and community-based settings. The student must receive a “C” grade or higher in the lecture component and a satisfactory grade in clinical lab in order to pass the course.

*Transfer Credit: CSU*

**NRSG 230**

**PSYCHOSOCIAL AND COMMUNITY NURSING 5 UNITS**

Class hours: 3 lecture/7.5 lab
Pre requisite: NRSG 222 or equivalent with a grade of Credit or “C” or higher. For Option C, D, E and F students: Admission to the Nursing Program.

The focus of this course is on the theory and clinical application of the Nursing Process based on the Roy Adaptation Model and concepts related to the role of the Associate Degree Nurse in the care of clients in acute psychiatric and community-based settings. The student must receive a “C” grade or better in the lecture component and a satisfactory grade in clinical lab in order to pass the course.

*Transfer Credit: CSU*

**NRSG 232**

**MEDICAL-SURGICAL NURSING 4 5 UNITS**

Class hours: 2.5 lecture/7.5 lab
Pre requisite: NRSG 230 or equivalent with a grade of Credit or “C” or higher. For Option C, D, and E students: Admission to the Nursing Program.

The focus of this course is on the theory and application of the Nursing Process based on the Roy Adaptation Model and concepts related to the role of the Associate Degree Nurse as the Provider of Care for medical-surgical patients and patients with women's health disorders in acute care settings. The role of the nurse as Manager of Care is introduced. The student must receive a grade of “C” or higher in the lecture component and a satisfactory grade in clinical lab in order to pass the course.

*Transfer Credit: CSU*
on the Roy Adaptation Model and concepts related to the role of the Associate Degree Nurse as a Provider of Care for patients with complex medical-surgical conditions in acute care settings. Continued emphasis is placed on the role of the nurse as Manager of Care and as a Member of the Discipline of Nursing. The student must receive a “C” grade or better in the lecture component and a satisfactory grade in clinical lab in order to pass the course.

Transfer Credit: CSU

NRSG 240
MEDICAL-SURGICAL NURSING 5 5 UNITS
Class hours: 2.5 lecture/7.5 lab
Prerequisite: NRSG 232 or equivalent with a grade of Credit or “C” or higher. For Option E and F Students: Admission to the Nursing Program.
The focus of this course is on the theory and clinical application of the Nursing Process based on the Roy Adaptation Model and concepts related to the role of the Associate Degree Nurse as a Provider of Care for patients with increasingly complex medical-surgical conditions in acute care settings and exposure to specialty care areas. The nurse’s role as Manager of Care continues to be emphasized with increased focus on delegation and the role of the nurse as Member of the Discipline of Nursing. The student must receive a “C” grade or better in the lecture component and a satisfactory grade in clinical lab in order to pass the course.

Transfer Credit: CSU

NRSG 245
TRANSITION 3 UNITS
All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

NRSG 251
BASIC ADULT PHYSICAL ASSESSMENT 1 UNIT
Class hours: .5 lecture/1.5 lab
Prerequisite: Current or prior enrollment in an accredited nursing program or licensure as a health care provider.
Corequisite: None.
Recommendation: None.
This course focuses on physical examination of healthy adults stressing identification of normal and common abnormal findings in diverse populations. Variations due to normal age-related changes are presented. Examination techniques and elements of assessing functional, cognitive, and fluid status are introduced. Analysis of findings with clinical application is emphasized from the perspective of the entry-level Registered Nurse. Basic physical examination is limited to selected body structures within the following organ systems: integumentary, sensory, respiratory, cardiovascular, gastrointestinal, musculoskeletal, and neurological. This course is offered on a credit/no credit basis only.

Transfer Credit: CSU

NON-CREDIT (ADULT EDUCATION) CLASS

AED 90.47 (Not degree applicable)
SUPervised Nursing — Tutorial 0 UNIT
Class hours: 9 lab Open entry/open exit
Prerequisite: None.
Corequisite: Any nursing course or equivalent.
This course is designed to facilitate the learning of nursing knowledge, skills, and concepts through individualized and mediated instruction. It is open to students in the nursing program or planning to transfer into the program. This course is offered on a credit/no credit basis only. (Formerly NRSG 47T)

PHARMACY TEACHER
(Health Occupations Division)

PHAR 45
Retail Products for Pharmacy Clerks 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides basic knowledge about Over-the-Counter (OTC) products in relation to their accepted therapeutic uses. Students will understand the steps involved in safely choosing a non-prescription product.

PHAR 47
PHARMACY CLERK CLINICAL EXPERIENCE 2 UNITS
Class hours: .33 lecture/6.83 variable semester lab hours
Prerequisite: PHAR 45, PHAR 60, and PHAR 60L or equivalent with grades of Credit or “C” or higher. Corequisite: None.
Recommendation: None.
This course is designed to provide the student with practical clerk experiences in selected outpatient community pharmacy settings working under the supervision of a registered pharmacist.

PHAR 50
PHARMACEUTICS 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: HO 56 or equivalent with a grade of Credit or “C” or higher.
Recommendation: None.
This course is designed to develop the practical application of fundamentals of measurements and mathematics utilized by the pharmacy technician.

PHAR 60
PHARMACY INTRODUCTION 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: PHAR 60L.
Recommendation: None.
This introductory course is designed to provide the student with an overview of the pharmacy profession and the role of the pharmacist, pharmacy technician and pharmacy clerk in community-based retail pharmacies. Students will be introduced to pharmacy law, will learn how to read and process prescriptions, and will be trained in the communication skills necessary to work in a retail setting.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Class Hours</th>
<th>Prerequisites</th>
<th>Corequisites</th>
<th>Corequisite Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 60L</td>
<td>PHARMACY SKILLS LAB</td>
<td>1</td>
<td>.67 lecture/1.33 lab</td>
<td></td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PHAR 62</td>
<td>PHARMACY OPERATIONS I</td>
<td>0.5</td>
<td>3 lecture/1 lab</td>
<td>PHAR 60 or equivalent with a grade of Credit of &quot;C&quot; or higher</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PHAR 63</td>
<td>PHARMACY OPERATIONS II</td>
<td>3</td>
<td>3 lecture/1 lab</td>
<td>PHAR 62 or equivalent with a grade of Credit or &quot;C&quot; or higher</td>
<td>None</td>
<td>Verification of typing proficiency at 30 wpm or BCOT 135 or equivalent with a grade of Credit or &quot;C&quot; or higher</td>
</tr>
<tr>
<td>PHAR 64</td>
<td>PHARMACY OPERATIONS III</td>
<td>2</td>
<td>2 lecture/1 lab</td>
<td>PHAR 50 and PHAR 63 or equivalent with grades of Credit or &quot;C&quot; or higher</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PHAR 73/74</td>
<td>PHARMACY TECHNICIAN OCCUPATIONAL WORK EXPERIENCE</td>
<td>3-4</td>
<td>1 lecture/200 variable semester lab hours</td>
<td>PHAR 64, PHAR 83, and PHAR 85 or equivalent with grades of Credit or &quot;C&quot; or higher</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PHAR 81</td>
<td>OVER-THE-COUNTER PRODUCTS</td>
<td>3</td>
<td>3 lecture</td>
<td>MA 161 or A&amp;P 120 or equivalent with a grade of Credit or &quot;C&quot; or higher</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PHAR 83</td>
<td>PHARMACY TECHNICIAN PHARMACOLOGY I</td>
<td>3</td>
<td>3 lecture</td>
<td>MA 161 or A&amp;P 120 or equivalent with a grade of Credit or &quot;C&quot; or higher</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PHAR 85</td>
<td>PHARMACY TECHNICIAN PHARMACOLOGY II</td>
<td>3</td>
<td>3 lecture</td>
<td>MA 161 or A&amp;P 120 or equivalent with a grade of Credit or &quot;C&quot; or higher</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>PHIL 100</td>
<td>INTRODUCTION TO PHILOSOPHY</td>
<td>3</td>
<td>3 lecture</td>
<td>Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or &quot;C&quot; or higher</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**PHILOSOPHY**

**(Humanities/Social Sciences Division)**

**PHIL 100**

**INTRODUCTION TO PHILOSOPHY**

Class hours: 3 lecture

Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.

This is a humanities course developing philosophical concepts through problems and systems of thought in selected Western philosophers such as Socrates, Plato, Aristotle, Augustine, Aquinas, Bacon, Kant, etc; it, furthermore, studies modern movements in Western culture such as dialectical materialism, pragmatism, analytic philosophy, and existentialism.

Transfer Credit: CSU; UC

---

**Announcement of Courses**

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
**PHIL 102**  (CAN PHIL 4)
**INTRODUCTION TO ETHICS**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
This course develops critical thinking skills necessary for evaluating and formulating argumentative/persuasive essays and practice in applying those skills.  
*Transfer Credit: CSU; UC*

**PHIL 104**  
**PHILOSOPHY OF CULTURAL DIVERSITY:**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: ENGL 52 or equivalent with a grade of Credit or “C” or higher is strongly recommended.  
This humanities course is designed to create understanding, appreciation, and tolerance of diverse cultures, particularly those of non-Western civilizations which are ethnic minority groups in American culture. Topics covered will include the nature of culture, the epistemology of cultural diversity, world views, religion, traditional values, ethnocentrism, cultural relativism, cultural pluralism, and the philosophy of liberation.  
*Transfer Credit: CSU; UC*

**PHIL 106**  (CAN PHIL 6)  
**INTRODUCTION TO LOGIC**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: ENGL 100 or equivalent with a grade of Credit or “C” or higher.  
This course gives an introduction to the basic principles of inductive and deductive reasoning, the uses of language, definition, analysis of fallacious arguments in various areas, and integration of composition and critical thinking skills.  
*Transfer Credit: CSU; UC*

**PHIL 200**  
**WORLD RELIGIONS**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
Corequisite: None.  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or ENGL 155 or equivalent with a grade of Credit or “C” or higher is strongly recommended.  
This course presents a comparative study of the major religions of the world including Hinduism, Buddhism, Taoism, Shinto, Judaism, Christianity, Islam, etc. The survey pertains to their origin, historic development, primary source book, theological doctrines and value system.  
*Transfer Credit: CSU; UC*

**PHIL 201**  
**INTRODUCTION TO TWENTIETH CENTURY PHILOSOPHY**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or completion of ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: Satisfactory completion of READ 42 or equivalent with a grade of Credit or “C” or higher.  
This course is a survey of the major philosophical movements that characterize the twentieth century, including the rise of Continental, Anglo-American, Marxist, Feminist, Asian, African, and Latin American philosophies. Students will become familiar with the diversity of styles, methods and approaches twentieth century philosophers have developed in response to the problems of self, subjectivity, consciousness, alienation, anxiety, authenticity, social justice, realism, relativism and the role of meaning and language in philosophical inquiry.  
*Transfer Credit: CSU; UC*

**PHIL 202**  
**CRITICAL THINKING AND ARGUMENTATIVE WRITING**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: ENGL 100 or equivalent with a grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course develops critical thinking skills necessary for evaluating and formulating argumentative/persuasive essays and practice in applying those skills.  
*Transfer Credit: CSU; UC*

**PHIL 204**  
**PHILOSOPHY OF THE BIBLE I (HEBREW SCRIPTURES)**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
This course is a general introduction to the philosophical, religious, cultural and historical influences on the development of the Hebrew Scriptures. The methods of critical analysis of Biblical materials from an academic point of view will be presented and discussed.  
*Transfer Credit: CSU; UC*

**PHIL 206**  
**PHILOSOPHY OF THE BIBLE II (CHRISTIAN SCRIPTURES)**  3 UNITS  
Class hours: 3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process to enter ENGL 100, or ENGL 52 or equivalent with a grade of Credit or “C” or higher.  
This course is a general introduction to the philosophical, religious, cultural and historical influences on the development of the Christian Scriptures. The methods of critical analysis of Biblical materials from an academic point of view will be presented and discussed.  
*Transfer Credit: CSU; UC*

**PHOTOGRAPHY**  
(Fine Arts/Communications Division)  

**PHOT 100**  (CAN ART 18)  
**INTRODUCTORY PHOTOGRAPHY**  3 UNITS  
Class hours: 2 lecture/4 lab  
Prerequisite: None.  
This is a beginning course in the theory and practice of photography. The lecture portion of the class will emphasize historical trends, contemporary applications, and an appreciation of photography as an art and as a craft. The lab portion will introduce the student to camera technique, film exposure, processing, darkroom techniques, lighting, and composition.  
*Transfer Credit: CSU; UC*

**PHOT 102**  
**INTERMEDIATE PHOTOGRAPHY**  3 UNITS  
Class hours: 2 lecture/4 lab  
Prerequisite: PHOT 100 or equivalent with a grade of Credit or “C” or higher.  
This photography course is a continuation and expansion of principles taught in the introductory class. This course includes the use of special film processing techniques, advanced exposure techniques, archival print processing, toning techniques, and an introduction to large format cameras. Special effects techniques, lighting set-ups, color film and digital photography will also be covered.  
*Transfer Credit: CSU*

**PHOT 110**  
**INTRODUCTION TO DIGITAL PHOTOGRAPHY**  3 UNITS  
Class hours: 2 lecture/4 lab  
Prerequisite: None.  
Corequisite: None.  

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

PHOT 112 INTERMEDIATE
DIGITAL PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 110 or ART 192 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course continues the instruction in digital photographic technique begun in PHOT 110, and explores digital photography as a new visual arts medium. More intensive use of tools and filters in Adobe Photoshop and other art- and photo-related software, advanced camera techniques, and scanning and output methods are included with emphasis on constructing meaning in imagery through digital processes.
Transfer Credit: CSU

PHOT 122 INTRODUCTION TO COLOR PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This course provides instruction in the basic principles of color photography with darkroom experience and digital processes. Negative and transparency film are covered developing and printing techniques; and legal, philosophical and sociological issues associated with digital photography. Emphasis is placed on constructing meaning in imagery through digital techniques.
Transfer Credit: CSU

PHOT 130 PHOTO JOURNALISM 3 UNITS
Class hours: 3 lecture
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course deals with the photographer as a journalist, focusing on theory and practice in press and publications photography, with emphasis on using the camera as a reporting and communications tool. Covered are news and feature photography and photographic essays, including composition, impact, and creativity, for newspapers, magazines, Internet and other mass communications media. Students may have had experience in newspaper or magazine work or equivalent with a grade of Credit or "C" or higher.
Transfer Credit: CSU

PHOT 160 HISTORY OF PHOTOGRAPHY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a survey of the history of photography from its origins to the present, speculating on the future. This course traces the development of photographic theory and practice from its inception, through postmodernism to the present. The major concepts of photographic representation and the impact of photography on society are also covered.
Transfer Credit: CSU; UC

PHOT 171 OCCUPATIONAL WORK EXPERIENCE IN PHOTOGRAPHY 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Occupational Work Experience in Photography, in a declared Photography major. One unit of Occupational Work Experience in Photography requires 60 non-paid hours or 75 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the students/workers, the college, and the employers/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their approved projects are completed. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

PHOT 200 ADVANCED PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 102 or equivalent with a grade of Credit or "C" or higher.
This course is designed to advance students' knowledge and skills beyond Intermediate Photography. This course will cover advanced large format camera use, studio strobe lighting techniques, digital photography, and professional presentation of photographs. At the end of the semester, student will be expected to present and portfolio of photographic prints that represent a body of work. Class will include black-and-white as well as color assignments.
Transfer Credit: CSU

PHOT 220 ADVANCED COLOR PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 124 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course will focus on the non-traditional use of light, color, and materials in the production of color photographic images. Topics include shooting techniques, lighting techniques, film and paper types, darkroom methods, computerized image editing and digital output methods, and camera techniques. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

PHOT 230 PORTRAIT PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or "C" or higher.
This is a course in the theory and practice of portraiture. Lectures will present lighting and contemporary retouching techniques for professional studio portraiture. Topics also include self-portraiture, extended environmental portraiture, typological portraits, narrative, documentary portraiture, candid camera, the snapshot aesthetic,

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

283
PHOT 232
APPROACHES TO STUDIO LIGHTING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course examines a variety of approaches to studio lighting in photography. Concept development, and execution, in the studio environment, as well as construction, location work, and lighting and exposure techniques will be covered. Students will concentrate on a semester-long project in a specialized area of studio work. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

PHOT 234
PORTFOLIO DEVELOPMENT 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 102 or equivalent with a grade of Credit or “C” or higher, or a combination of PHOT 100 and PHOT 110 or equivalent with a grade of “C” or higher.
This course is designed to address the marketing aspects of photography. Preparation of portfolios, care of original photographs, photography markets, legal aspects, and gallery exhibition are the primary course topics.
Transfer Credit: CSU

PHOT 240
EXPERIMENTAL PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or “C” or higher or equivalent.
This is a course in the theory and practice of experimental photography. Content includes a variety of approaches that differ from standard photography, including experiments with camerless photography, photomontage, change procedures, 3-D photography, the slide show, and new genres of photo-based art-making involving sculpture, installation, projection, and performance.
Transfer Credit: CSU

PHOT 242
NON-SILVER PHOTOGRAPHY 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or “C” or higher.
This course explores historical and photographic processes (printing-out processes) which utilize hand-applied emulsions and large contact negatives in the production of photographic imagery. Emphasis is placed on the use of process for communicative content.
Transfer Credit: CSU

PHOT 250
CONTEMPORARY PHOTOGRAPHIC EXPRESSION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or “C” or higher.
This course is an in-depth study of the use of visual language for contemporary photographic expression. Imagery is stressed, with process used as the tool for achieving a particular expression. Students will explore photographic genres, as well as discover the uniqueness of their own approach through the creation of a personal body of work.
Transfer Credit: CSU; UC

PHOT 252
PHOTOGRAPHY OF THE LANDSCAPE 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: PHOT 100 or equivalent with a grade of Credit or “C” or higher.
This course examines the interpretation of the landscape through the medium of photography. Theories of photographic approaches to the landscape and its development and industrialization are stressed. Topics include preparation for field work, film types, exposure techniques, appropriate equipment and care, and printing techniques. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

PHYSICAL EDUCATION
(HPE/Athletics Division)

PE 100
INTRODUCTION TO PHYSICAL EDUCATION AND SPORT 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
This course is a survey of physical education and sport along with the allied fields and their significance in the school and non-school program. Emphasis will be placed on the acquisition of leadership skills and knowledge in planning, organizing, presenting and evaluating activities. Additionally, career opportunities in physical education and all related fields will be surveyed.
Transfer Credit: CSU; UC

PE 101A#
SPORTS OFFICIATING FOR FOOTBALL 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Theory and practice are combined in a study of the organization and techniques of officiating football.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 101B#
SPORTS OFFICIATING FOR MEN’S AND WOMEN’S BASKETBALL 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to give the student a detailed study of the techniques of officiating men’s and women’s basketball.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 102A#
SPORTS OFFICIATING FOR BASEBALL 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an in-depth study of the mechanics and rules of officiating baseball.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

Announcement of Courses
Announcement of Courses

PE 102# SPORTS OFFICIATING FOR MEN’S AND WOMEN’S TRACK AND FIELD 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an in-depth study of the organization and techniques of officiating track and field and cross-country.
Transfer Credit: CSU; UC
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 105 STUDENT ATHLETES IN SOCIETY 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with an analysis and interpretation of issues affecting student athletes in past and present societies. Physiological, sociological, and psychological aspects of student athletes as related to sport and education will be covered. Students will plan for future career opportunities.
Transfer Credit: CSU

PE 106 WOMEN IN SPORTS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with a chronological history, analysis and interpretation of people, events and issues affecting women in sports, in past and present societies. Physiological, sociological, and psychological aspects of female athletes as related to sport, history and education will be covered. Students will gain an understanding of the significant events of women in athletics from the past to the present and how their significance will determine the future of women in sports.
Transfer Credit: CSU

PE 107 INTRODUCTION TO ATHLETIC TRAINING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course provides instruction in the prevention, assessment, management, and reconditioning of athletic injuries. Taping and bandaging, protective padding, and modalities used for treatment will be presented.
Transfer Credit: CSU; UC

PE 108# PROFESSIONAL ACTIVITIES FOR MEN’S SPORTS I 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
Emphasis will be on the theory and practice of football and basketball. The course presents the fundamental knowledge of the sports through techniques of lecture, discussion, and practice.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 109# THEORY OF COACHING BASEBALL 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course includes the study of the various aspects of coaching baseball. Topics include organizing the program, developing skills, offensive and defensive play strategies, and conditioning techniques. This course will assist coaches for youth league, high school and college teams.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 110# THEORY OF TRACK AND FIELD 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to introduce the basic fundamentals of coaching the events in track and field.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 113# PROFESSIONAL ACTIVITIES FOR CO-ED SPORTS I 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course is designed to present the theory and practice of water safety and life saving techniques. It leads to American Red Cross Advanced Life Saving and Water Safety Certificate. This course is recommended for all physical education, recreation, and recreation aide majors, but is open to other interested students.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 111## SEDENTARY ACTIVITIES FOR STUDENTS WITH DISABILITIES 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education history questionnaire, intake interview assessment procedures.
This course is designed for the student who is not able to participate in virtually any physical activity course due to a disability. An individualized sedentary activity program will be tailored to the physical abilities and disabilities of the student. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 4 units.

PE 121## ADAPTED CARDIOVASCULAR EXERCISE 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedure.
This course is designed to develop the general fitness level for the disabled students who may not be placed in a regular activity course. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 4 units.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

PE 122##
ADAPTED STRENGTH TRAINING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedures.
This course is designed for the student who is not able to participate in the standard circuit weight-training program due to a disability. An individualized weight-training program will be tailored to the physical abilities and disabilities of the student. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 123##
ADAPTED SWIMMING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedures.
This course is designed for the student who is unable to participate in a regular swimming course due to a disability. Improvement in basic swimming and water safety skills along with other pool activities such as hydroexercises and mobility activities will be included. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 124##
WHEELCHAIR ACTIVITIES 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedures.
This course is designed to develop the general fitness level for the wheelchair bound student through a variety of modified sport activities. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 125
WATER SAFETY
INSTRUCTOR (WSI) 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: PE 150B or equivalent, 17 years of age or older and CPR card. Competence in fundamentals of backstroke, sidestroke, breaststroke, crawl and diving.
This course is offered with the authorization of the American Red Cross to provide students with Instructor Candidate Training (ICT), along with the Water Safety Instructor (WSI). It is a comprehensive analysis of principles of movement, organizational strategies utilized in presenting aquatic activities and advanced swimming skills. It also includes an opportunity to qualify for the American Red Cross Water Safety Instructor certification. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

PE 126
LIFEGUARD TRAINING 2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: PE 150A, swimming, beginning or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course offers instruction and practice in American Red Cross Lifeguard Training and Conditioning. Emphasis will be placed on personal safety, safety and self-rescue in the use of small craft, elementary forms of rescue, the swimming rescue, and artificial respiration. American Red Cross certification in Lifeguard Training will be available upon completion of the class. Students must be at least 15 years old at start of semester to qualify for American Red Cross (ARC) certificate “Lifeguard Training and Community First Aid and Safety.” This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

PE 130##
STRETCHING AND RELAXATION 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course emphasizes the development of flexibility in muscles and joints to prevent injury and improve posture and body alignment. Relaxation techniques and stretching improve general wellness as they become part of lifestyle. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 131##
WALKING FOR FITNESS 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will emphasize instruction and practice of walking techniques for speed, distance and endurance. Information on aerobic conditioning, heart rate, stretching and stress reduction will be covered. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 132A##
LOW IMPACT AEROBICS 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
Student will receive practical instruction in ways to improve their cardiovascular endurance, flexibility and body composition through various low impact aerobic activities. Lectures may include the areas of basic nutrition, body composition, posture analysis and principles of safe and effective exercise. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 132B##
AEROBIC ACTIVITIES 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
This course is designed to meet the needs of students who want practical instruction in ways to improve their cardiovascular endurance and flexibility through various aerobic activities and stretching movements. Lectures may include areas of basic nutrition, body composition, posture analysis and principles of safe and effective exercise. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.
PE 133##

**STEP AEROBICS** 1.5 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed as a contemporary workout to improve each participant’s
strength and cardiovascular fitness level through steady-state stepping movements
that will improve health. Students will be exposed to a graduated, continuous system
of rhythmic stepping at various platform heights, emphasizing strength, flexibility,
and endurance. The class will include proper body alignment and mechanics, basic nutrition,
injury prevention, strength training, and personal fitness assessment. This course may be
taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these
PE courses with ##’s combined; maximum
credit, 4 units.

PE 134##

**WATER AEROBICS** 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This water aerobics exercise class emphasizes development of cardiorespiratory endurance,
flexibility and muscle tone. No swimming skills are required. This course may be taken
a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these
PE courses with ##’s combined; maximum
credit, 4 units.

PE 135A##

**CIRCUIT WEIGHT TRAINING, BEGINNING** 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course covers the fundamentals and techniques of circuit weight training with the use of machines, barbells, dumbbells, jump ropes, and other equipment in the development of an improved level of fitness and physical condition. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these
PE courses with ##’s combined; maximum
credit, 4 units.

PE 135B##

**CIRCUIT WEIGHT TRAINING, INTERMEDIATE/ADVANCED** 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course will consist of applied theory as well as physical conditioning. Students will use three types of exercise to reach goals: Isotonic, Isometric, and Isokinetic. Individual instruction will be given along with the discussion of strengths, weaknesses, and nutritional needs of each individual. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these
PE courses with ##’s combined; maximum
credit, 4 units.

PE 136 ##

**INDOOR CYCLING** 1 UNIT
Class hours: .5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide a physical and mental conditioning program involving
efficient and effective use of the stationary bicycle. This course may be taken a maximum
of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these
PE courses with ##’s combined; maximum
credit, 4 units.

PE 137##

**SONG UNIT** 2 UNITS
Class hours: 6 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to cover topics related to health and wellness including principles of fitness, nutrition, coronary heart disease, and stress management. An exercise lab will include pre- and post assessment of each student’s fitness components such as cardiovascular fitness, muscular strength and endurance, flexibility and body composition. Individualized exercise prescription is provided for each student to improve his/her fitness components. Progress is monitored throughout the semester. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these
PE courses with ##’s combined; maximum
credit, 4 units.

PE 138##

**YOGA** 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an introduction to Yoga based on basic yoga practices and principles. Instruction will include yoga postures, guided relaxation, and breathing practices. Benefits of yoga include increased flexibility, strength, balance, and body awareness, as well as stress reduction. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these
PE courses with ##’s combined; maximum
credit, 4 units.

PE 139##

**PILATES CONDITIONING** 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide a physical and mental conditioning program involving
exercises based on the Pilates technique. These exercises are designed to increase body awareness by increasing circulation, flexibility, and muscular strength. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these
PE courses with ##’s combined; maximum
credit, 4 units.

PE 141##

**FITNESS AND WELLNESS** 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course is designed to cover topics related to health and wellness including principles of fitness, nutrition, coronary heart disease, and stress management. An exercise lab will include pre- and post assessment of each student’s fitness components such as cardiovascular fitness, muscular strength and endurance, flexibility and body composition. Individualized exercise prescription is provided for each student to improve his/her fitness components. Progress is monitored throughout the semester. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these
PE courses with ##’s combined; maximum
credit, 4 units.

PE 142##

**FITNESS AND WELLNESS FOR OLDER ADULTS** 2 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: Medical Clearance from Physician.
This course is designed for older adults and includes an exercise program consisting of mild cardiovascular, stretching, and weight lifting activities. Testing is provided to determine a physical assessment of the individual for cardiovascular fitness, body composition, strength, and flexibility. Students establish their own training program and participate
in the above activities, based on the recommended exercise prescription. Lectures provide information on nutrition, stress management, conditioning, and diet related to the special interests, and diet needs of the aging and older adults. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 143##
PERSONAL FITNESS PROGRAM 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course is designed as an exercise program consisting of cardio-respiratory, stretching, weight training activities. Testing will be provided to determine physical assessment and improvement in the areas of flexibility, strength, endurance, aerobic fitness, and body composition. Each student will establish and practice his or her training program based on recommended exercises. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 144##
EXERCISE PHYSIOLOGY
LABORATORY TECHNIQUES 2 UNITS
Class hours: 1 lecture/2 lab
Prerequisite: None.
This course offers individuals a background in working with various instruments used in exercise testing. Discussions will include the scientific bases for the exercise tests.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 145##
BASIC TRAINING AND PHYSICAL CONDITIONING 1 UNIT
Class hours: 0.5 lecture/2.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a high-energy course incorporating sport-specific activities and physical drills. Training will improve sports performance, as well as have a conditioning effect. Participants entering this class should be at an intermediate to advanced fitness level. This class may be taken for a maximum of 4 times.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 146##
WEIGHT MANAGEMENT 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide strategies for weight management. It will include discussion in the physical, emotional, and nutritional components of a successful weight management plan and provide the opportunity for each student to establish and practice an individualized program. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 147##
TRIATHLON BASICS 1 UNIT
Class hours: 0.5 lecture/2.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: Clearance from a medical professional.
This class studies the sport of triathlon. Students will learn the basics of swimming skills, bicycling techniques, running drills, and muscular endurance training. Participants entering this class should be at an intermediate to advanced fitness level. Upon completion of the class, participants will be able to finish a spring distance triathlon. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 148##
BODY SCULPTING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed as an exercise program consisting of activities to improve the participant's muscular tone, strength, endurance, and flexibility. The student will participate in body sculpting exercises using various resistance techniques and equipment. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 149A ##
BEGINNING JOGGING FOR FITNESS 1 UNIT
Class hours: .5 lecture/1.5 lab
Prerequisite: None
Corequisite: None
Recommendation: None
This course is designed to be an introduction to a running program that will benefit a broad spectrum of fitness levels. This class will incorporate a weekly mileage progression with attention to running mechanics and injury prevention. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 149B ##
INTERMEDIATE JOGGING FOR FITNESS 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None
Corequisite: None
Recommendation: Ability to run one mile under 12 minutes.
This course is designed to build a moderate running base and improve stride mechanics through various training techniques. Training will be monitored through weekly mileage progression, heart rate training, and stride mechanics. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 150A##
SWIMMING, BEGINNING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None
Fundamental swimming strokes, elementary diving and water safety. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 150B##
SWIMMING, INTERMEDIATE/ADVANCED 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None
Intensive drill in backstroke, sidestroke, breaststroke and crawl. Fundamentals of diving and water polo. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 151##
WRESTLING, BEGINNING  1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course is designed to provide instruction and practice in the fundamentals of wrestling. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 153A##
BACKPACKING, BEGINNING  2 UNITS
Class hours: 1 lecture/3 lab with one three-day field trip.
Prerequisite: None.
This course provides the student with the knowledge and skills necessary for all-season, off-trail backpacking. A backpack trip of at least three days at the end of the course will be required. Student will be expected to furnish their own backpacking equipment. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 153B##
BACKPACKING, ADVANCED  2 UNITS
Class hours: 1 lecture/2 lab with two 4+ A 6 day field trip or one 9 day field trip.
Prerequisite: PE 153A or equivalent with a grade of Credit or “C” or higher.
This course is designed to provide the student with advanced skills and knowledge used in extensive all-season, cross-country backpacking. Emphasis will be placed on survival and navigational skills. Two trips of 4 1/2 days (or one 9-day trip in summer session) will be required. Students will be expected to furnish their own backpacking equipment. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 154A##
BADMINTON, INTERMEDIATE/ADVANCED  2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course is designed for badminton players wishing to improve skills and techniques. Emphasis will be on improving form and court strategy in offensive and defensive play. Interclass competition will be held. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 154B##
BADMINTON, INTERMEDIATE/ADVANCED  2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course is designed to teach fundamental strokes and court techniques for singles, doubles, and mixed doubles. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 155A##
BOWLING, BEGINNING  1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
The fundamental theory, techniques, rules, etiquette and scoring of bowling will be emphasized. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 155B##
BOWLING INTERMEDIATE/ADVANCED  1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course is designed to help the student improve their skill in bowling by correction of individual faults, advanced lane and adjustment techniques and opportunity for league competition in the class. Additional areas of knowledge will include league organization and psychology of competition. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 158A##
RACQUETBALL, BEGINNING  1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
The emphasis will be on fundamental strokes, techniques of playing, rules and strategy of racquetball for doubles, singles, and "cutthroat" play. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 158B##
RACQUETBALL, INTERMEDIATE/ADVANCED  2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course is designed to provide fundamental techniques and rules of racquetball. Strategies, offensive and defensive deployments in singles and doubles will be addressed. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 159A##
TENNIS, BEGINNING  1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course will cover fundamental stroke
techniques for singles and doubles. The history of tennis, playing area, tennis vocabulary, etiquette and rules will be included. This course may be taken a maximum of 2 times.

*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 159B##
TENNIS, INTERMEDIATE/ADVANCED 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course is designed for those players wishing to increase skills in tennis. An emphasis will be on improvement of form, strokes, and serves. Intra-class competition will be held. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 160##
PERSONAL SELF DEFENSE 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
A course designed to provide women with specific attributes, knowledge and skills useful in self-defense. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 170##
WATER POLO 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
During this course, the student will learn the skills of water polo, which include physical skill-development, conditioning, game strategy and terminology. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 171A##
SOFTBALL 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course is designed to provide students with the knowledge and practical skills necessary to effectively participate in softball. The course is designed to improve form, learn advanced skills and strategy. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 171B##
SOFTBALL, INTERMEDIATE/ADVANCED 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course is designed to provide students with advanced knowledge and practical skills necessary to effectively participate in Fast Pitch softball. Emphasis will be placed on skills which will prepare the students to compete on the intercollegiate softball team. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 171C##
SLOW-PITCH SOFTBALL 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course is designed to provide students with the knowledge and practical skills necessary to effectively participate in slow-pitch softball. In slow-pitch softball the ball is thrown slowly, traveling in an arc. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 172A##
VOLLEYBALL, BEGINNING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course is designed to develop soccer technique through a conditioning based program. The class will incorporate soccer fitness training while building a foundation of skill development and progression. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 172B##
VOLLEYBALL, INTERMEDIATE/ADVANCED 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
A course designed for students wishing to improve form, learn advanced skills and court strategies in volleyball. Intra-class competition will be held. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 173
SOCCER FITNESS AND TECHNIQUE 1 UNIT
Class hours: .5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This class is designed to develop soccer technique through conditioning.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 175A##
BASEBALL, BEGINNING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course is designed to present the fundamental techniques, rules and etiquette of the sport of baseball. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 175B##
BASEBALL, INTERMEDIATE/ADVANCED 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
The course is designed to improve individual techniques for baseball players. Team competitive play situations will be provided in order to increase students’ skills, knowledge, and strategy. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 176A##
BEGINNING BASKETBALL 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course will include instruction and practice in shooting, passing, offensive play, individual and team defense. This course may be taken a maximum of 2 times.

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 176##
BASKETBALL, ADVANCED 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Team competitive play situations will be provided in order to increase students’ skills, knowledge, and strategy. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 177##
FLAG FOOTBALL 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
This course is designed to teach the fundamental theory and skills involved in the game of flag football. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 178##
FOOTBALL, INTERMEDIATE/ADVANCED 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course is designed to teach individual techniques of offense and defense in football. It is recommended for physical education majors and those interested in varsity competition. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 179B##
SOCCER, INTERMEDIATE/ADVANCED 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Must demonstrate some knowledge of basic Soccer skills. This course is designed to deal with advanced techniques, skills, and tactics for soccer players. It is recommended for those interested in varsity competition. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

PE 180
INTRODUCTION TO DANCE MOVEMENT 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
Students will study dance movement in three basic styles: ballet, modern and jazz. For each form, proper body alignment, stretching and styling techniques will be presented in a dance class format. This includes warm-ups, progressions and dance combinations. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

PE 181
INTRODUCTION TO DANCE CULTURES OF THE WORLD 2 UNITS
Class hours: 4 activity
Prerequisite: None.
Students will study dance styles representative of different cultures and nationalities. Introduction to many different dance forms will be explored, taking into consideration historical background, related folklore and how dance differs from culture to culture. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

PE 182
DANCE, MODERN, INTERMEDIATE 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Students will study intermediate level modern skills and will utilize basic movement and music principles to choreograph dance sequences. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

PE 183
DANCE PRODUCTION 2 UNITS
Class hours: 4 activity
Prerequisite: None.
Students will study the elements of dance production such as choreography, lighting, design, costume design, music, and concert publicity. Students will choreograph and perform in the concert or work backstage as part of the technical crew. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

PE 184
CHOREOGRAPHY 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Students will study the elements of dance composition as well as learn about well known choreographers and their work. The study will include the selection of movement appropriate to the meaning of a dance, the arrangements of movement in space, and the overall design of the dance and its staging. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

PE 185
PARTNERING FOR DANCE 2 UNITS
Class hours: 1 lecture/3 lab
Corequisite: None.
Students will study partner dancing involving groups of two or more dancers. It will serve as an introduction to the art of partnering in modern, jazz, and classical choreography. Not limited to male/female partnering, students will study choreography involving any body contact or shifting of weight from one individual to another. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
co-
motion and musicality. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

PE 186B
INTERMEDIATE BALLET 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Students will study the advanced terminology and technique of classical ballet. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

DANCE REPERTORY 2 UNITS
Class hours: 4 lab
Prerequisite: None.
Students will study a repertory of dances in the styles of ballet, modern, jazz, ethnic, and dance theatre. The advanced student will participate in performances on campus as well as in the community. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

PE 188
DANCE PERFORMANCE 2 UNITS
Class hours: 4 lab/rehearsal
Prerequisite: None.
Students will study the aspects of dance performance through participation in the semester dance concert. Emphasis is placed on improving classroom dance technique and elevating skills to a performance level. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

DANCE WORKSHOP 2 UNITS
Class hours: 4 lab
Prerequisite: None.
Students will study the technical dance skills in ballet, jazz and modern dance. The course includes exploration of the elements of composition and affords the opportunity to experiment with improvisation and set choreography. Students will work on individual and group projects and participate in the faculty dance concert. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

PE 190
DANCE NOTATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Students will study basic dance notation with in-depth work in elementary Labanotation and an introduction to Benesh and Kineseography notation systems. These systems are taught by using graphs, musical scores, and stick figures or drawings.
Transfer Credit: CSU; UC

PE 191
HISTORY OF DANCE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Students will study dance history from ancient to modern times, beginning with tribal, ethnic and folk dance and on through contemporary ballet, modern and jazz dance.
Transfer Credit: CSU; UC

PE 192
DANCE AND DIGITAL TECHNOLOGY 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
The student will study how technology has historically and traditionally been used in the field of dance. Emphasis will be placed on the various technologies that currently impact the art of dance. The majority of topics in the course will be related to the art of dance.
Transfer Credit: CSU

PE 193
INTRODUCTION TO BALLROOM DANCE 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to introduce ballroom dancing through the understanding of history, music, and performance opportunities. Basic steps, variations and styling techniques for the fox trot, Waltz, swing, cha cha, tango, bolero, rhumba, samba and other selected styles will be included. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

COMMERCIAL DANCE 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to emphasize movement for commercial dance work used in film, concert dance, television and industrial shows and commercials. It offers instruction in current trends of popular dance. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

LATIN SOCIAL DANCE 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is an overview of Latin social dance including tango, salsa, merengue, paso doble, bolero, mambo and cha cha. Areas of study include movement theory, dance vocabulary, performance, etiquette and dance history. This course may be repeated for a maximum of 4 times.
Transfer Credit: CSU; UC

COMMERCIAL DANCE 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to develop the student for intercollegiate competition in baseball. Skill techniques, good sportsmanship, team play, and strategy will be emphasized. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

*UC credit limits may apply. Any or all of these PE courses with ##’s combined; maximum credit, 4 units.

BASEBALL 3 UNITS
Class hours: 10 hrs per week
Daily practice
Prerequisite: None.
This course is designed to develop the student for intercollegiate competition in baseball. Skill techniques, good sportsmanship, team play, and strategy will be emphasized. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 202##
BASKETBALL, MEN 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
Training for intercollegiate competition in basketball. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 204##
BASKETBALL, WOMEN 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
This course will include training for intercollegiate competition in women's basketball. It includes daily practice of two hours plus an intercollegiate game schedule. Conditioning for competition will be stressed. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 206##
CROSS COUNTRY, MEN 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
This course is designed to develop the student for intercollegiate competition in cross-country running. Proper warm-up exercises and conditioning will be emphasized. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 207##
CROSS COUNTRY CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course presents techniques for cross-country preseason conditioning and training. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 208##
CROSS COUNTRY, WOMEN 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
This course is designed to provide training for women in intercollegiate competition in cross-country. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 210##
FOOTBALL, MEN 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
This course is designed to provide training for intercollegiate competition in football. Individual skill techniques, good sportsmanship, team play, and strategy will be emphasized. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 211##
FOOTBALL CONDITIONING (OLYMPIC WEIGHTS - POWER LIFTING) 2 UNITS
Class hours: 1 lecture/3 lab
Corequisite: None.
This course is designed to prepare students for athletic competition in football. It is an intensive power training program based on the overload principle. This course uses Olympic weights in a structured program that primarily builds power. It does not use isometric or cardio-vascular training. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 212##
FOOTBALL TRAINING AND TECHNIQUES 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
This course will consist of in-season conditioning, theory of play, opponent evaluation, and goal setting for football. The student will be instructed in each of the above to develop a successful physical and mental approach to weekly contests. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 213##
INTERCOLLEGIATE GOLF 3 UNITS
Class hours: 10 hours activity
Daily Practice
Prerequisite: None.
This class prepares students for intercollegiate competition in golf and gives them an opportunity to participate in this competition. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 217##
SOCCER, MEN 3 UNITS
Class hours: 10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Training for intercollegiate competition in soccer. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 219##
SOCCER, WOMEN 3 UNITS
Class hours: 10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Training for intercollegiate competition in soccer. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

PE 221##
SOFTBALL, WOMEN 3 UNITS
Class hours: 10 hrs per week - Daily Practice
Prerequisite: None.
Training for intercollegiate competition in women's softball. This course may be taken a

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
### PE 222#
#### SOFTBALL PRE-SEASON CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
The training and preparation to become a competitive softball athlete involves more than the learning of basic skills. This course will include aerobic conditioning, strength and flexibility conditioning and agility skills. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

### PE 223#
#### SWIMMING, MEN 3 UNITS
Class hours: 10 hrs per week -
Daily practice
Prerequisite: None.
Training for intercollegiate competition in swimming. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

### PE 225#
#### SWIMMING, WOMEN 3 UNITS
Class hours: 10 hrs per week -
Daily practice
Prerequisite: None.
This course is designed to provide training for women in intercollegiate competitive swimming. Emphasis will be on conditioning and stroke analysis. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

### PE 227#
#### TENNIS, MEN 3 UNITS
Class hours: 10 hrs per week -
Daily practice
Prerequisite: None.
This course is designed to provide training for intercollegiate competition in tennis for men. Conditioning, skills, techniques, court strategy, and rules of play will be emphasized. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

### PE 228#
#### TENNIS CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Corequisite: None.
This class will provide training and drills necessary to develop skills and knowledge to compete on a college tennis team. Physical conditioning, aerobics, strength and agility drills will be used. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

### PE 229#
#### TENNIS, WOMEN 3 UNITS
Class hours: 10 hrs per week -
Daily practice
Prerequisite: None.
This course will prepare students for competition in women's tennis. Emphasis will be on conditioning and learning competitive strategy and techniques. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

### PE 231#
#### TRACK AND FIELD, MEN 3 UNITS
Class hours: 10 hrs per week -
Daily practice
Prerequisite: None.
This course is designed to develop the student for intercollegiate competition in track and field events. Individual techniques and skills for different events will be emphasized. Proper warm-up exercises for different events will be stressed. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

### PE 232#
#### TRACK AND FIELD, WOMEN 3 UNITS
Class hours: 10 hrs per week -
Daily practice
Prerequisite: None.
This course is designed to develop the student for intercollegiate competition in Track and Field events. Individual techniques and skills for different events will be emphasized. Proper warm-up exercises for different events will be stressed. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

### PE 233#
#### VOLLEYBALL, WOMEN 3 UNITS
Class hours: 10 hrs per week -
Daily Practice
Prerequisite: None.
This course is designed to provide training for intercollegiate competition in women's volleyball. It involves daily practice of two hours plus an intercollegiate match schedule. Conditioning for tournament play will be stressed. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.

### PE 234#
#### VOLLEYBALL PRE-SEASON CONDITIONING 1 UNIT
Class hours: 0.5 lecture/1.5 lab
Corequisite: None.
This course is designed to cover the following three areas: 1) analysis and training of volleyball skills including specialized positions, 2) analysis of various team offensive and defensive systems, and 3) physical conditioning including jump training, strength training and aerobic conditioning. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined; maximum credit, 4 units.
Announcement of Courses

PE 238##
WRESTLING OFF SEASON TRAINING 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide the physical training and preparation to become a competitive college wrestler. It will be an intensive power-training program based on the overload principle. The course will improve strength, flexibility, and endurance. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 239##
WATER POLO - MEN 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
Training for intercollegiate competition in water polo. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 241##
WATER POLO – WOMEN 3 UNITS
Class hours: 10 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
Training for intercollegiate competition in water polo. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 243##
WRESTLING 3 UNITS
Class hours: 10 hrs per week - Daily practice
Prerequisite: None.
This course is designed to provide training for intercollegiate competition in wrestling. Individual skills, proper conditioning, and warm-up exercises will be emphasized. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 245##
PEP UNIT 2 UNITS
Class hours: 6 lab
Prerequisite: None.
This course is designed to develop, improve and implement the skills necessary to be an effective cheerleader at the community college level. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 253
SPORTS PSYCHOLOGY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to provide students with the knowledge and experience related to the psychological aspects of sport and physical activity. This course will also assist students in understanding the forces involved in participation and performance in athletics through exploring cultural, emotional, and social factors that affect the concept of sport. The course informs the coach and athlete how to improve sport performance through psychological means.
Transfer Credit: CSU

PE 254
MEASUREMENT AND INTERPRETATION OF FITNESS 3 UNITS
Class hours: 2.5 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course covers the theory and practical application of current testing procedures and instrumentation used in exercise testing. Students learn to perform and interpret the basic measurement protocols for cardiorespiratory endurance, muscular strength and endurance, flexibility, body composition and blood pressure.
Transfer Credit: CSU

PE 255
PROGRAMS AND PRINCIPLES OF CONDITIONING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will provide the student with basic knowledge and principles related to exercise prescription. Students will develop the skills necessary to design and implement training programs as they relate to the components of fitness. Safeguards and effectiveness for all levels of fitness will be addressed.
Transfer Credit: CSU

PE 260
ATHLETIC INJURY ASSESSMENT AND RECONDITIONING 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None
Corequisite: None.
Recommendation: None.
This course allows the student to expand upon the knowledge of the mechanism, assessment and reconditioning of athletic injuries. Emphasis is placed upon injury mechanism and assessment, the phases of healing, modalities used in the healing process, and the application of exercise and exercise equipment in the reconditioning of athletic injuries. Transfer Credit: CSU

PE 261
LEADERSHIP: THEORY & PRACTICE FOR THE FITNESS PROFESSIONAL 3 UNITS
Class hours: 3 lecture
Prerequisite: None
Recommendation: None
This course is designed to cover topics related to leadership in the fitness industry (athletic coach, physical education instructor, personal trainer, and athletic trainer) and the various styles, theories, and implementation of leadership skills into a fitness setting. Understanding fitness leadership theories will enable the student to establish an effective connection with constituents.
Transfer Credit: CSU; UC

PE 271A
OCCUPATIONAL WORK EXPERIENCE IN ATHLETIC 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units, including Occupational Work Experience in Athletic Training, in a declared Athletic Training or Exercise Science major. One unit of Occupational Work Experience in Athletic Training requires 60 non-paid hours or 75 paid hours of work per semester. Recommendation: None.

Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the students/workers, the college, and the employers/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their approved projects are completed. This course may be taken a maximum of 4 times. (Formerly PE 271)

Transfer Credit: CSU

**PE 271B**

**OCCUPATIONAL WORK EXPERIENCE IN FITNESS** 1 UNIT

Class hours: 1 lecture

Prerequisite: None

Corequisite: Enrollment in 7 or more units, including Occupational Work Experience in Fitness, in a declared Fitness Specialist or Exercise Science major. One unit of Occupational Work Experience in Fitness Specialist requiring 60 non-paid hours or 75 paid hours of work per semester. Recommendation: None

Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the students/workers, the college, and the employers/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Students will meet weekly with the instructor until their approved projects are completed. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

**PHYSICAL SCIENCE**

(Science/Engineering/Math Division)

**PS 100**

**PHYSICAL SCIENCE OF MODERN TECHNOLOGY** 3 UNITS

Class hours: 3 lecture

Prerequisite: MATH 40 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the Math Placement Process. This is a lecture/demonstration course especially designed to develop an understanding of basic science facts and concepts for non-science majors. Study of the sciences that make our technological world possible will be stressed.

Transfer Credit: CSU

**PS 110**

**INTRODUCTION TO PHYSICAL THERAPY** 4 UNITS

Class hours: 3 lecture/3 lab

Prerequisite: Admission into Physical Therapist Assistant Program.

This course will introduce the student to the history and ethics of physical therapy as they relate to the health care system; the development of the team approach and the philosophy of rehabilitation; the use of physical agents and interventions; body mechanics and proper handling of patients; vital signs and their relationship to patient care.

Transfer Credit: CSU

**PS 112**

**PHYSICAL SCIENCE FOR ELEMENTARY SCHOOL TEACHERS** 3 UNITS

Class hours: 2 lecture/3 lab

Prerequisite: MATH 105 or MATH 110A or current enrollment or equivalent with a grade of Credit or “C” or higher, or satisfactory completion of the Math Placement Process. Corequisite: None. Recommendation: None.

This course is an introduction to basic physical science facts and concepts. The physical sciences that make our technological world possible will be studied. This course is designed to give a general introduction to fundamental concepts and to prepare students for teaching at the elementary school level.

Transfer Credit: CSU

**PTA 100**

**PREPARING FOR CAREERS IN PHYSICAL THERAPY** 3 UNITS

Class hours: 3 lecture

Prerequisite: None.

Corequisite: None. Recommendation: None.

This course introduces students to the field of physical therapy in the rehabilitation setting. Topics covered include documentation in the medical record, interviewing patients, therapeutic interaction with patients and their caregivers, problem identification and helpful responses, assertive roles in rehabilitation, cultural sensitivity, working with persons with disabilities, and patient/family teaching.

Transfer Credit: CSU

**PTA 110**

**PATHOLOGY** 3 UNITS

Class hours: 3 lecture

Prerequisite: PTA 110 or equivalent with a grade of Credit or “C” or higher.

Corequisite: None.

This course will include introduction to instruction in observation of common pathological conditions. Emphasis will be placed on the following systems: musculoskeletal, circulatory, respiratory, gastrointestinal, and genitourinary.

Transfer Credit: CSU

**PTA 125**

**CLINICAL PRACTICUM I** 4 UNITS

Class hours: 221 variable semester lab hours

Prerequisite: None.

Corequisite: None.

This course is designed to give the student an initial exposure to physical therapy interventions. Students will practice application of heat and cold physical agents,
gait and transfer training and medical record review under the direction of the physical therapy clinical instructor. The laboratory experience involves training in one or more physical therapy settings as designated by the instructor. Uniforms are required. This course is offered on a credit/no credit basis only.  
Transfer Credit: CSU

PTA 127  
SOFT TISSUE INTERVENTIONS 2 UNITS  
Class hours: 2 lecture  
Prerequisite: PTA 120 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: None.  
Recommendation: None.  
This course introduces students to interventions for the myofascial system. Content includes the philosophy of care, facilitation of mechanical, neurological and physiological changes and documentation of interventions. Specific topics covered are soft tissue injuries, treatment protocols, muscle adaptations, release, and scar tissue intervention.  
Transfer Credit: CSU

PTA 128  
PHYSICAL THERAPY ASPECTS OF GROWTH AND DEVELOPMENT 3 UNITS  
Class hours: 3 lecture.  
Prerequisite: Acceptance into the Physical Therapist Assistant Program.  
This course will introduce the student to concepts and physical therapy principles applied to the developmental process from gestation to adulthood. Emphasis will be placed on neurodevelopmental techniques used for abnormal development and for patients with neurologic or musculoskeletal disorder occurring in those age groups.  
Transfer Credit: CSU

PTA 129  
PHYSICAL THERAPY ASPECTS OF AGING AND INTEGRUMENTARY MANAGEMENT 1.5 UNITS  
Class hours: 1.5 lecture  
Prerequisite: Acceptance into the Physical Therapist Assistant Program.  
Corequisite: None.  
Recommendation: None.  
This course will introduce the student to concepts and physical therapy principles applied to the aging process, including management of integumentary problems. Emphasis will be placed on pathologies and physical therapy interventions for disabilities in aging, burns, and wounds.  
Transfer Credit: CSU

PTA 230  
THERAPEUTIC EXERCISE 4 UNITS  
Class hours: 3 lecture/3 lab  
Prerequisite: PTA 120 or equivalent with a grade of Credit or "C" or higher.  
This course is for second year physical therapist assistant majors. Therapeutic exercise introduces the student to the use of exercise as a preventive and intervention mechanism for pathological conditions which influence strength, endurance and flexibility of the human body. Emphasis is placed upon design and application of exercise, developmental sequence of exercise, types of exercise, and the use of exercise equipment. Instruction includes the body’s physiological response to exercise.  
Transfer Credit: CSU

PTA 233  
PROSTHETICS AND ORTHOTICS FOR ALLIED HEALTH PROFESSIONALS 2 UNITS  
Class hours: 2 lecture  
Prerequisite: None.  
This course is an introduction to the application of prosthetics and orthotic devices in the rehabilitation process of persons with disabilities. Included in the course is a survey of commonly used devices, principles of fitting and alignment, criteria for selection of various components, instruction in donning, removing and maintenance of prostheses and orthoses, patient education in use of devices, and development of skill in fabrication of plaster positioning splints for upper and lower extremities.  
Transfer Credit: CSU

PTA 235  
NEUROLOGY 3 UNITS  
Class hours: 3 lecture  
Prerequisite: PTA 120 or equivalent with a grade of Credit or "C" or higher.  
This course is designed to increase the student’s knowledge in the anatomy and physiology of the nervous system. Information regarding the central, peripheral and autonomic systems is provided. Emphasis will be placed on the clinical manifestations of disease or injury to the nervous system as it relates to clinical problems encountered in physical therapy.  
Transfer Credit: CSU

PTA 236  
CLINICAL PRACTICUM II 4 UNITS  
Class hours: 221 variable semester lab hours  
Prerequisite: PTA 125 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: None.  
This course is designed to teach the student the necessary intervention skills for physical therapy patient care. These skills will include active, passive and resistive exercise programs, as well as continued practice in physical agent application, gait and transfer training. Students will also learn fundamental procedures for clinical education from direct teaching and evaluation of learning. Laboratory experience involves training in one or more physical therapy settings as designated by the instructor. Student uniforms are required. This course is offered on a credit/no credit basis only.  
Transfer Credit: CSU

PTA 240  
ACTIVITIES OF DAILY LIVING 2 UNITS  
Class hours: 2 lecture  
Prerequisite: PTA 230 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: None.  
This course will present instruction in the functional rehabilitation of the disabled. Emphasis will be on understanding and utilization of the physical therapy evaluation for implementation of intervention programs. This course will present clinical instruction activities of daily living training techniques, wheelchair fitting, Jobst measurement and professional presentations.  
Transfer Credit: CSU

PTA 245  
ADVANCED MODALITIES 3 UNITS  
Class hours: 2 lecture/3 lab  
Prerequisite: PTA 235 or equivalent with a grade of Credit or "C" or higher.  
This course is a study of the specific advanced physical therapy interventions and physical agents which are employed in the physical therapy clinic and which require greater expertise in their application.  
Transfer Credit: CSU

PTA 246  
CLINICAL AFFILIATION 4 UNITS  
Class hours: 13 lab  
Prerequisite: PTA 235 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: None.  
This course will provide supervised instruction in activities of daily living training techniques; wheelchair fitting; types of orthotic and prosthetic devices and their proper application; and splinting and bandaging procedures in selected clinical facilities. Experiences will be in acute rehabilitation or out-patient physical therapy settings. Student uniforms are required. This course is offered on a credit/no credit basis only.  
Transfer Credit: CSU

Announcement of Courses
PHYSICS
(Science/Engineering/Math Division)

PHYS 50
PRINCIPLES OF TECHNOLOGY 3 UNITS
Class hours: 2 lecture/2 lab/1 hr. lab arr.
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the Math Placement Test or completion of MATH 40 or MATH 42 or equivalent with a grade of Credit or “C” or higher.
This is an introductory course in principles of physics and its applications in a technological world. It will include applications of physical, mechanical, fluid, electrical and thermal systems. The course includes integrated labwork. (This course is not open to students with credit in PHYS 100 or higher.)

PHYS 100
ELEMENTARY PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: MATH 140 or equivalent with a grade of Credit or “C” or higher.
This course is a general survey of the basic principles of physics. It includes mechanics, heat, sound, electricity and magnetism, light, and modern physics with emphasis on mechanics. It is designed primarily as a prerequisite to courses in Engineering Physics.
Transfer Credit: CSU; UC*
*UC credit limits may apply. No credit for PHYS 100 if taken after PHYS 101 or PHYS 201.

PHYS 101 (CAN PHYS SEQ A) (CAN PHYS 2)
GENERAL PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: MATH 140 or equivalent with a grade of Credit or “C” or higher.
This course is designed to give students an understanding and appreciation of the basic principles governing the everyday happenings in the physical environment. The subjects covered are mechanics, heat and sound.
Transfer Credit: CSU; UC*
*UC credit limits may apply. PHYS 101, PHYS 102 combined with PHYS 201, PHYS 202 and PHYS 203: maximum credit, one series, deduct credit for duplication of topics.

PHYS 102 (CAN PHYS SEQ A) (CAN PHYS 4)
GENERAL PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: PHYS 101 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of PHYS 101. It includes electricity and magnetism, light, and modern physics.
Transfer Credit: CSU; UC*
*UC credit limits may apply. PHYS 101, PHYS 102 combined with PHYS 201, PHYS 202 and PHYS 203: maximum credit, one series, deduct credit for duplication of topics.

PHYS 201 (CAN PHYS B) (CAN PHYS SEQ B)
ENGINEERING PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: PHYS 100 or PHYS 201 and MATH 170 or equivalent with grades of Credit or “C” or higher.
This is the first course in a three-semester sequence designed to meet the requirements for engineering and related majors. Topics to be covered are mechanics, wave motion and sound.
Transfer Credit: CSU; UC*
*UC credit limits may apply. PHYS 101, PHYS 102 combined with PHYS 201, PHYS 202 and PHYS 203: maximum credit, one series, deduct credit for duplication of topics.

PHYS 202 (CAN PHYS 12) (CAN PHYS SEQ B)
ENGINEERING PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: PHYS 101 or equivalent with a grade of Credit or “C” or higher.
This course emphasizes the physics of electricity and magnetism. The units of study under electricity include electrostatics, DC circuits and capacitance. Magnetism will cover magnetic fields, force on conductors, torque on coils, motional electromagnetic force and induction, self and mutual inductance, magnetic properties of matter and some basic AC theory.
Transfer Credit: CSU; UC*
*UC credit limits may apply. PHYS 101, PHYS 102 combined with PHYS 201, PHYS 202 and PHYS 203: maximum credit, one series, deduct credit for duplication of topics.

PHYS 203 (CAN PHYS 14) (CAN PHYS SEQ B)
ENGINEERING PHYSICS 4 UNITS
Class hours: 3 lecture/1 quiz/2 lab
Prerequisite: PHYS 201 or equivalent with a grade of Credit or “C” or higher.
This course is a study of heat, light and modern physics. The unit on heat covers such topics as thermometry, calorimetry, the gas laws, thermodynamics and kinetic theory. Optics include geometric and physical optics. Modern physics touches on selected topics such as photoelectric effects, x-ray production and nuclear effects.
Transfer Credit: CSU; UC*
*UC credit limits may apply. PHYS 101, PHYS 102 combined with PHYS 201, PHYS 202 and PHYS 203: maximum credit, one series, deduct credit for duplication of topics.

PLASTICS/COMPOSITES MANUFACTURING TECHNOLOGY
(Technology Division)

PMT 1 (Not degree applicable)
PLASTICS FUNDAMENTALS 1.5 UNITS
Class hours: 1 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with a basic understanding of occupations, manufacturing processes, and materials used in the plastics industry. Students seeking employment or employees wanting to enhance their skill level and knowledge of plastics will benefit from this course. The curriculum includes a variety of plastics facilities tours, guest speakers, and current industry information. Students have an opportunity to explore their own interest within the plastics manufacturing industry.

PMT 2 (Not degree applicable)
INJECTION MOLDING FUNDAMENTALS 1.5 UNITS
Class hours: 1 lecture/1.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This class introduces students to basic fundamentals of set-up and operation of injection molding equipment in the plastics and composites industry. Safe handling of all machine operations and hands on training utilizing current industry equipment is emphasized. Students receive training that enables them to apply for entry-level positions in the plastics and composites industry. The course may be taken a maximum of 2 times.

PMT 3 (Not degree applicable)
PLASTICS REPAIR 1 UNIT
Class hours: 1 lecture
Prerequisite: None.
This course will introduce students to the theory and practical application of repair for plastics and composites. The study of repair techniques as well as safety in handling hand tools, power tools, and special plastic repair equipment will be covered. It will prepare students for practical hands-on training to gain experience of plastic repairs. Related technical information and demonstrations are presented concerning plastic identification, materials, and processes of repair. The PMT 631 specialty lab class is recommended to perform the hands-on training and repairs.
PMT 4
PLASTICS FABRICATION 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This is a specialty course for the advanced plastics student or individuals employed in the plastics industry that wish to further their skills and knowledge of plastics. Laboratory experience will continue to stress major areas of specialization selected by the student, including materials, process applications, and equipment.

PMT 5 (Not degree applicable)
SURVEY OF COMPOSITES 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
This course provides an overview of manufacturing procedures, processing and materials used within the composites industry. The design, construction, and fabrication of laminated parts, as well as related terminology, will be covered. PMT 63L is recommended.

PMT 40
EXTRUSION FUNDAMENTALS 1.5 UNITS
Class hours: 1.5 lecture/.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will provide students with theory and "hands-on" exposure to fabrication methods with "high-tech" materials. Areas of emphasis include computer programs, surface bonding, fastener installation, injection processes and approved repair methods.

PMT 43/44 (Not degree applicable)
PLASTICS MANUFACTURING TECHNOLOGY OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Plastics work experience 73 or 20 hours of employment per week for Plastics work experience 74. The employment must be in a job related to the student's educational goal.
Corequisite: (1) Enrollment in the Plastics vocational program with 7 or more units including occupational work experience.
Work experience/career internship provides the opportunity for Plastics Manufacturing Technology students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. These courses may be taken a maximum of 4 times.

PMT 50
SURVEY OF HYDRAULICS AND PNEUMATICS 1.5 UNITS
Class hours: 1.5 lecture/.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will introduce the student to the fundamentals and principles of hydraulics and pneumatics as they relate to industrial manufacturing and equipment. Applications of each will be explored. The design and understanding of simple circuits and systems in the laboratory will be examined.

PMT 51
COMPOSITES FABRICATION 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: PMT 70 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This course will provide students with theory and "hands-on" exposure to fabrication methods with "high-tech" materials. Areas of concentration will include composite structures, material choices, design of composite structures, surface bonding, fastener installation, inspection processes and approved repair methods. Fabrication, safety procedures, and material handling are also covered.

PMT 55
PROTOTYPING 1 UNIT
Class hours: 1 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides insight into contemporary prototyping materials and methods used in industry. The focus is on preproduction consumer products from initial ideas through research and development concluding with manufacturing processes.

PMT 57
SURVEY OF PLASTICS 1.5 UNITS
Class hours: 1.5 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to a basic understanding of occupations, manufacturing processes and materials used within the plastics industry. Students seeking employment and furthering their knowledge of plastics will benefit from a variety of plant tours, guest speakers, and information in areas of interest within the plastics manufacturing industry.

PMT 58
INDUSTRIAL DESIGN FOR PLASTICS 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is for students desiring knowledge of materials and processes used in the field of industrial design and applications. Content includes an overview of plastics technology and lecture/demonstrations in principle processes, including molding, reinforced materials, forming, moldmaking, casting, bonding, laminating, and fabrication.
PMT 59
INJECTION MOLDING I  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This course introduces the student to the fundamentals of set-up and operation of injection molding equipment as found in industry. Training on actual industrial equipment as well as safe material and machinery handling is stressed. This course may be taken a maximum of 2 times.

PMT 60
EXTRUSION  3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: None.
Recommendation: PMT 100 or equivalent with a grade of Credit or “C” or higher.
This course provides the student with details that apply to application of the extrusion process. The necessary equipment and materials and their selection are covered in depth. Current industry trends in materials handling, machine operation and how these relate to the manufacturing process are emphasized.

PMT 61
FIBERGLASS TECHNOLOGY  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Recommendation: PMT 100 or equivalent with a grade of Credit or “C” or higher.
This is a course in the industrial use of fiberglass resins, cloth, mat and composite materials. The care and use of equipment (fiberglass chopper gun, gel-coat spray gun) is stressed. Other areas explored are mold making, repair, and proper use of resins and fillers. Mixing of resins and safety procedures are emphasized. This course may be taken a maximum of 2 times.

PMT 62
PLASTIC PACKAGING  2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to the theory and practical methods of plastic packaging. Areas of concentration are on plastic materials, processing applications and equipment used in consumer and industrial packaging. Material identification and plastic material recycling are also covered.

PMT 63L
SPECIALTY PLASTICS LAB  0.5 UNIT
Class hours: 1.5 lab
Prerequisite: None.
This is a lab course to complement other courses in the Plastic/Composite curriculum. It is designed to give practical experience in working with plastics and fiberglass materials. This course may be taken a maximum of 4 times.

PMT 64
PLASTICS PRODUCTION  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This is an intermediate course designed to further the student’s knowledge of materials and processes. Laboratory work will stress the two major areas of specialization selected by the student from the following: Plastics Molding, Thermoforming Fabrication, Reinforced Plastics, Testing Equipment Set-Up and Maintenance, and Tooling.

PMT 65
MOLDMAKING  3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
This class introduces student to the fundamentals of plastic injection mold designs and fabrication. This course includes basic shop operation, demonstrations, safety and the technology of moldmaking in the plastic industry.

PMT 66
HYDRAULICS AND PNEUMATICS  3 UNITS
Class hours: 2.5 lecture/1.5 lab
Prerequisite: None.
This course will introduce the student to the fundamentals and principles of hydraulics and pneumatics as they relate to plastics and machine tool equipment. Applications of each will be explored, as well as the design of simple circuits and systems in the laboratory.

PMT 67
FIBERGLASS PRODUCTION  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This is a course in fiberglass/composites manufacturing technology. Areas of concentration include the processes and techniques of fiberglass composites as applied in industry. This course will place the student in production situations similar to those encountered in industry. The student may also have an opportunity to construct a project of his/her own with instructor approval.

PMT 68
PLASTICS MATERIALS AND PROCESSES  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This course is directed toward the study of plastic materials used in processing areas.

PMT 69
RESIN TRANSFER MOLDING  1 UNIT
Class hours: 1 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed for individuals in the field of fiberglass composites, tooling and production. This course includes lecture/demonstration with “hands-on” Resin Transfer Molding (RTM) moldmaking and production techniques. Emphasis is on converting parts

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

currently being made by the hand lay-up method to the closed mold RTM process. Topics include safe RTM equipment operation, mold design, fabrication, resin and catalyst selection, reinforcements, and core materials. Production methods leading to high output and troubleshooting techniques are discussed.

PMT 100  PLASTICS TECHNOLOGY  2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
This course provides knowledge of materials and processes used in the field of plastic manufacturing today. An overview of plastic technology and application of production processes, as well as fabrication methods are covered. This course includes molding, forming, reinforced materials, bonding, laminating, and finishing techniques, and plastic materials identification.
Transfer Credit: CSU

POLITICAL SCIENCE
(Humanities/Social Sciences Division)

POL 90  INTERNET STRATEGIES
For Civic Communication  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None. This course, using traditional and online techniques looks at the growing use of the Internet by public agencies, government relations departments, non-profit and community-based organizations, and political/civic campaigns, and civic institutions. Students will examine the effects of Internet on society as well as the economic impact of Internet on political, public and civic institutions. Strategic issues related to aligning Internet solutions and overall institutional objectives will be addressed including Internet tools for fundraising, targeted communication, volunteer recruitment, polling, management, narrow casting and online collaboration.

POL 101 (CAN GOVT 2)  AMERICAN POLITICAL INSTITUTIONS  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Credit or “C” or higher.
This course is a study of national, state and local government, including the national and state constitutions. It emphasizes the rights and responsibilities of citizens and political processes and issues facing government. Emphasis will be given to practical policy formulation at all levels.
Transfer Credit: CSU; UC*
*UC credit limits may apply. POL 101 and POL 201 combined: maximum credit, one course.

POL 210  INTERNATIONAL RELATIONS  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or “C” or higher.
This course is a study of basic concepts, theories, and principles of international politics. Emphasis shall be placed on an examination of contemporary world affairs including the importance of nationalism, imperialism, ideology, alliance systems, the rise of the developing nations and the nature of international organizations. Specific case studies shall be examined to illustrate the various principles of international relations.
Transfer Credit: CSU; UC

POL 220  COMPARATIVE GOVERNMENT  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Satisfactory score on the English Placement Process or ENGL 52 with a grade of Credit or “C” or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or “C” or higher.
This course includes a study of comparative systems of government, differing ideologies, and current political problems. Analyses of revolutionary forces in the 20th century are conducted for political insight and understanding.
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course is an in-depth survey of controversial issues in psychology highlighting interesting points of disagreement among psychologists on a theoretical as well as practical level. Topics include parapsychology, the inheritance of intelligence, biofeedback, pros and cons of psychological testing, meditation, psychosurgery, and deception in psychological experiments.

Transfer Credit: CSU; UC

**PSY 149**

**PSYCHOLOGY: THE STUDY OF HUMAN BEHAVIOR** 2 UNITS

Class hours: 2 lecture
Prerequisite: None.

This course is a general introductory psychology course which will acquaint the students with basic psychological terms, concepts, principles and methodological approaches associated with the scientific study of behavior. An eclectic blend of behavioristic, Freudian and Humanistic points of view will be presented in the televised lessons.

Transfer Credit: CSU; UC

**PSY 150**

**PERSONAL AND SOCIAL ADJUSTMENT** 3 UNITS

Class hours: 3 lecture
Prerequisite: None.

Recommendation: PSYC 101 and ENGL 52 or equivalent with grades of Credit or “C” or higher.

This course is a broad survey of the psychological theories of human personality, encompassing the behavioral, psychoanalytic and humanistic points of view. The focus is the way in which each of the three views may be utilized to explain normal personality adjustment. The class is intended for college transfer students, especially Social Science majors.

Transfer Credit: CSU; UC

**PSY 210**

**ELEMENTARY STATISTICS** 4 UNITS

Class hours: 3 lecture, 3 lab
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Credit or “C” or higher.

This course emphasizes the calculation and interpretation of the basic statistical measures, with major emphasis upon the meaning, limitations, and applicability of statistical procedures. It is intended for majors and minors in the behavioral sciences, emphasis upon the meaning, limitations, and applicability of statistical procedures. The course will include the theory of parametric and non-parametric statistical methods and its application to psychological data. Topics will include descriptive statistics, probability and sampling distributions, statistical inference and power, linear correlation and regression, chi-square, t-test, and one-way analysis of variance. Application of statistical software to psychological data is required.

Transfer Credit: CSU; UC*

*UC credit limits may apply. PSYC 210 combined with MATH 112: maximum credit, one course.

**PSYC 220**

**RESEARCH METHODS** 4 UNITS

Class hours: 3 lecture, 3 lab
Prerequisite: PSYC 101 or equivalent with a grade of Credit or “C” or higher.

Recommendation: Satisfactory score on English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.

An introduction to the scientific study of psychological principles, this course is intended primarily for prospective psychology majors and other students who plan further work in psychology. Independent projects are developed, performed and reported with emphasis on laboratory and naturalistic techniques of observation and investigation.

Transfer Credit: CSU; UC

**PSYC 245**

**DRUGS AND BEHAVIOR** 3 UNITS

Class hours: 3 lecture
Prerequisite: None.

This course entails a detailed survey of the various types of psycho-active drugs that are used and misused in our culture, including legal
Announcement of Courses

PSYC 251
DEVELOPMENTAL PSYCHOLOGY

Class hours: 3 lecture
Prerequisite: None.
An integrated study of the social, emotional, cognitive, and biological foundations of the human life cycle from conception to death will be presented in this course. Attention will also be devoted to the study of research methods and the application of research findings to ongoing developmental problems. Implications for personal and professional use will be discussed.
Transfer Credit: CSU

PSYC 261
SOCIAL PSYCHOLOGY

Class hours: 3 lecture
Prerequisite: None.
This course emphasizes an introduction to methods and content of social psychology; theories of social behavior; communication; social influence; conformity; aggression; leadership; and prejudice. Since emphasis will be given to practical applications of research findings, this elective course is recommended for students majoring in the social and behavioral sciences.
Transfer Credit: CSU; UC

PSYC 271
ABNORMAL PSYCHOLOGY

Class hours: 3 lecture
Prerequisite: None.
This course entails a detailed survey of the various types of abnormal behavior, including behavior resulting from anxiety disorders, mood disorders, substance abuse, sexual disorders, personality disorders, childhood and aging disorders and schizophrenia. The different models of abnormal behavior, its causes, treatment, and prevention, as well as ethics and the law are discussed.
Transfer Credit: CSU; UC

PSYC 272
SPECIAL POPULATIONS

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides an overview of special populations with mental illness, including the homeless, transitional age youth, the elderly, veterans, gays, lesbians, bisexuals, transsexuals, individuals with physical disabilities, individuals with substance abuse, and different racial and ethnic groups. Emphasis is placed on the issues that are specific to special populations with mental illness, including living skills, education, self-development, empowerment, leadership, transitional support, and recovery efficacy.
Transfer Credit: CSU

PSYC 273
MENTAL HEALTH WORKER FIELD EXPERIENCE

Class hours: 1 lecture/6 lab
Prerequisite: INST 151, INST 152, PSYC 101, PSYC 271 AND PSYC 272 with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
The field experience includes the practice of working with a Rehabilitation Team under the direct supervision of a professional Psychosocial Rehabilitation specialist. Emphasis will be placed on helping relationships, including helping with personal/family issues, employment, living with mental illness, cultural/ethnic issues and any other special population issues. While interacting with clients, students will engage in the four components of rehabilitation: hope, empowerment, self-responsibility, and obtaining a meaningful role in life. The students will develop a professional attitude in all phases of psychosocial rehabilitation, including the legal and ethical aspects of rehabilitation. Weekly seminars are held to evaluate and review clinical applications.
Transfer Credit: CSU

RTV 151
MOTION PICTURES, RADIO, AND TELEVISION

Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This is a broad survey of the history, theory, and production techniques of motion pictures, radio, and television with emphasis on the form, content, and social impact of each. Students will participate in at least one field trip to a motion picture, radio, or television studio. (This course is not open to students currently enrolled in or who have completed TH 151.)
Transfer Credit: CSU

RTV 152
INTRODUCTION TO BROADCASTING

Class hours: 3 lecture
Prerequisite: None.
As an introduction to the basic phases of radio and television broadcasting, this course covers historical, legal, and practical aspects of broadcasting. Students will learn microphone and camera techniques, studio procedure, and station staffing as well. Field trips to radio and television stations may be included. (Formerly TH 152)
Transfer Credit: CSU

RTV 155
RADIO PRODUCTION

Class hours: 2 lecture/3 lab
Prerequisite: None.
This course is a study and practice of production and departments involved in radio broadcasting. Students make actual broadcasts and recordings and are responsible for staffing and some programming of the campus radio station WPMD-956, 1700 AM, and WPMD on the Internet. This course may be taken a maximum of 4 times. (Formerly TH 155)
Transfer Credit: CSU

RTV 171
OCCUPATIONAL WORK EXPERIENCE IN BROADCASTING

Class hours: 1 lecture
Prerequisite: None.
Corequisite: Enrollment in 7 or more units in a declared Broadcast Media Major. One unit of Occupational Work Experience in Theatre require 60 non-paid hours or 75 paid hours of work per semester.
Recommendation: None.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experience on the job/training site. The aim of the course is to assist students in expanding specific job skills. This creates greater communication with increased understanding between the students/workers, the college, and the employer/trainers. In the first semester, students will meet with the instructor for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. This course may be taken a maximum of 4 times. (Formerly TH 171)
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

READING

(Liberal Arts Division)

READ 6 (Not degree applicable)

TUTOR TRAINING 0.5 UNIT
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Credit or “C” or higher.

This course is designed to acquaint the tutor with techniques in assisting students to gain better scholastic achievement. Those students who fail to complete nine hours of course work will not receive credit for this course. The course may be taken a maximum of 1 time. This course is offered on a credit/no credit basis only.

READ 42 (Not degree applicable)

READING ACCESS FOR COLLEGE SUCCESS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Recommendation: Completion of the Reading Placement Process.

This course is designed to help culturally diverse students make the transition from non-credit courses into college-credit programs. It is open to non-readers and limited readers, both native and immigrants. Visual, auditory, tactile, and kinesthetic instructions are included. Phonics, vocabulary, reading, and writing skills are stressed.

READ 43 (Not degree applicable)

BASIC READING SKILLS 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 42 or equivalent with a grade of Credit or “C” or higher.

Recommendation: None.
This course is designed for students who wish to improve basic reading skills. Coursework includes work on fundamental word analysis skills and fundamental comprehension skills. This course will be offered on a credit/no credit basis only. To receive credit for this course, students will need to demonstrate that they are reading at the tenth grade level.

READ 44 (Not degree applicable)

EFFECTIVE STUDY METHODS FOR COLLEGE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
The student will become aware of and experience proven learning techniques ensuring improved comprehension and retention of information from college lectures and textbooks. Skills to be emphasized include: study time management, methods for reading textbooks efficiently, note-taking techniques, understanding textbook assignments, preparation for examinations, test-taking techniques, effective listening techniques, guidelines for vocabulary development, memory techniques, the preparation of research papers and library skills. Study skills surveys will be used to help students identify and improve upon their personal study skills habits and their individual mode of learning.

READ 46 (Not degree applicable)

VOCATIONAL/TECHNICAL READING 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.

This course is designed to increase reading speed by developing an improved reading method through learning rapid reading techniques, gaining flexibility in adjusting reading speed to suit purpose for reading and difficulty of the material, overcoming habits of regression and subvocalization, recognizing basic writing structures and literary elements as aids to comprehension.

Transfer Credit: CSU

READ 100A

SPEED READING: METHODS 1.5 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is identical to the first half of Reading 100. It is designed to improve reading speed by utilizing knowledge of basic writing structures and literary elements as aids to comprehension, mastering speed study techniques, and speed research techniques, and applying all methods and techniques learned in Reading 100A to various types of college level reading materials.

Transfer Credit: CSU

READ 100B

SPEED READING: APPLICATIONS 1.5 UNITS
Class hours: 3 lecture
Prerequisite: READ 100A or equivalent with a grade of Credit or “C” or higher.
This course is identical to the second half of Reading 100. It is designed to improve comprehension while reading rapidly by utilizing knowledge of basic writing structures and literary elements as aids to comprehension, mastering speed study techniques, and speed research techniques, and applying all methods and techniques learned in Reading 100A to various types of college level reading materials.

Transfer Credit: CSU

READ 200

ANALYSIS AND CRITICAL READING 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of or higher.
Corequisite: None.
Recommendation: Completion of ENGL 52 or equivalent with a grade of Credit or “C” or higher.

The course focuses on student understanding of the cognitive processes of critical thinking to critical reading in an integrated, interdisciplinary framework. Emphasis is placed on the development of critical thinking, reading, and writing skills with applications in interpretation, analysis, and criticism of academic readings.

Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

304
This beginning course emphasizes expressive signs, receptive signs and finger spelling. An appreciation of cultural diversity is developed through the study of the differences and similarities between deaf and hearing cultures.

**Transfer Credit:** CSU; UC

**SL 102**  
**INTERMEDIATE AMERICAN SIGN LANGUAGE**  
3 UNITS  
Class hours: 3 lecture/1 lab  
Prerequisite: SL 101 or equivalent with a grade of Credit or “C” or higher.  
This course is a continuation of the study of the basic principles of American Sign Language with an emphasis on conceptual accuracy. A deeper appreciation of deaf culture is developed by studying the deaf community, encouraging participation in deaf community events, and understanding various communication technology used by deaf people.

**Transfer Credit:** CSU; UC

**SL 201**  
**ADVANCED AMERICAN SIGN LANGUAGE**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: SL 102 or equivalent with a grade of Credit or “C” or higher.  
This course provides a review and in-depth study of the grammatical concepts of American Sign Language. It will further develop the appreciation of cultural diversity particularly in the deaf community. The class is conducted primarily in American Sign Language.

**Transfer Credit:** CSU; UC
### SOC 210
**AMERICAN MINORITY RELATIONS** 3 UNITS
- **Class hours:** 3 lecture
- **Prerequisite:** None.
- **Recommendation:** SOC 101 or equivalent with a grade of Credit or "C" or higher.
- This course is a survey of theories, problems, nature, and the dynamics of racism. Power and inequality, prejudice and discrimination and patterns of racial/ethnic relations are examined conceptually and historically, using data from scientific, philosophical, sociopolitical, legal and cultural sources. Models and concepts for positive change will be explored.
- **Transfer Credit:** CSU; UC

### SOC 215
**SOCIOLOGY OF CULTURAL DIVERSITY: CHALLENGE AND CHANGE** 3 UNITS
- **Class hours:** 3 lecture
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.
- This course is designed to create an awareness of, an appreciation of, and a tolerance of diverse cultures. Topics covered will include the nature of culture, world views, customs and mores, views on religion, marriage and the family, children and the elderly, ethnocentrism, stereotyping, the nature of prejudice and discrimination, and social change.
- **Transfer Credit:** CSU; UC

### SOC 220
**INTRODUCTION TO HUMAN SERVICES** 3 UNITS
- **Class hours:** 3 lecture
- **Prerequisite:** None.
- **Recommendation:** SOC 101 or equivalent with a grade of Credit or "C" or higher.
- Sociology 220 represents an introduction to the purposes, historical context and organizational structure of human services. Emphasis is threefold: the development of human services and related careers in response to situations of individuals or groups who need assistance to live better lives (purpose); the recent history of human services dating from the early 1960s, which is marked by an increased awareness that many people need different kinds of assistance; and the purposes of the organizations that deliver services to clients.
- **Transfer Credit:** CSU

### SOC 225
**CONTEMPORARY SOCIAL ISSUES** 3 UNITS
- **Class hours:** 3 lecture
- **Prerequisite:** None.

### SPANISH
(Liberal Arts Division)

### SPAN 101
**ELEMENTARY SPANISH** 5 UNITS
- **Class hours:** 5 lecture, 1 hr. lab arr.
- **Prerequisite:** None.
- This beginning Spanish course emphasizes listening, speaking, reading, and writing and helps to develop an appreciation of cultural diversity through the study of differences and similarities between cultures.
- **Transfer Credit:** CSU; UC*
- *UC credit limits may apply. SPAN 101 and SPAN 111 combined: maximum credit, one course.

### SPAN 102
**ELEMENTARY SPANISH** 3 UNITS
- **Class hours:** 5 lecture + 1 hr. lab arr.
- **Prerequisite:** SPAN 101 or equivalent with a grade of Credit or "C" or higher.
- This course is a continuation of the study of basic principles of Spanish with an emphasis on oral and written communication. It helps to continue to develop an appreciation of cultural diversity through the study of differences and similarities between cultures.
- **Transfer Credit:** CSU; UC*
- *UC credit limits may apply. SPAN 102 and SPAN 112 combined: maximum credit, one course.

### SPAN 103A
**ELEMENTARY SPANISH FOR TEACHER PREPARATION I** 3 UNITS
- **Class hours:** 3 lecture/1 lab
- **Prerequisite:** None.
- **Corequisite:** None.
- **Recommendation:** None.
- This beginning course in Spanish language for teacher preparation emphasizes listening, speaking, reading, and writing, and helps to develop an appreciation of cultural diversity through the study of differences and similarities between cultures.
- **Transfer Credit:** CSU

### SPAN 103B
**ELEMENTARY SPANISH FOR TEACHER PREPARATION II** 3 UNITS
- **Class hours:** 3 lecture/1 lab
- **Prerequisite:** SPAN 103A or equivalent with a grade of Credit or "C" or higher.
- **Corequisite:** None.
- **Recommendation:** None.
- This course is a continuation of the study of basic Spanish language principles for teacher preparation with an emphasis on oral and written communication. It further develops an appreciation of cultural diversity through the study of differences and similarities between cultures.
- **Transfer Credit:** CSU

### SPAN 111
**ELEMENTARY SPANISH FOR SPANISH SPEAKERS** 5 UNITS
- **Class hours:** 5 lecture, 1 lab
- **Prerequisite:** None.
- This beginning course corresponding to SPAN
SPAN 112
ELEMENTARY SPANISH
FOR SPANISH SPEAKERS 5 UNITS
Class hours: 5 lecture, 1 lab
Prerequisite: SPAN 101 or SPAN 111 or SPAN 103B or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of SPAN 111 or SPAN 101 designed for the native speaker. It corresponds to SPAN 102 with an emphasis on oral and written communication. This course is designed for students that already speak, understand and have studied Spanish. It helps develop the appreciation of cultural diversity through the study of differences and similarities between the diverse Latin-American and Spanish cultures.
Transfer Credit: CSU; UC*
*UC credit limits may apply. SPAN 101 and SPAN 112 combined: maximum credit, one course.

SPAN 201 (CAN SPAN SEQ B)(CAN SPAN 8)
INTERMEDIATE SPANISH 5 UNITS
Class hours: 5 lecture/1 lab arranged
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Credit or “C” or higher.
This course provides a review and in-depth study of important grammatical concepts. Reading and interpretation of literary works by Hispanic writers and guided and original compositions are included. This course will further develop the appreciation of cultural diversity. The class is conducted primarily in Spanish.
Transfer Credit: CSU; UC

SPAN 202 (CAN SPAN SEQ B)(CAN SPAN 10)
INTERMEDIATE SPANISH 4 UNITS
Class hours: 4 lecture
Prerequisite: SPAN 201 or equivalent with a grade of Credit or “C” or higher.
This course provides a review and in depth study of grammatical concepts. Reading and interpretation of literary works by Latin American and Spanish writers, and guided and original compositions are included. This course provides further practice in the discussion and presentation of current cultural topics through literature. This class, conducted primarily in Spanish, will further develop the appreciation of cultural diversity and is recommended for all Spanish majors.
Transfer Credit: CSU; UC

SPAN 205
ADVANCED SPANISH
COMPOSITION 3 UNITS
Class hours: 3 lecture
Prerequisite: SPAN 201 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None. This course is a continuation of the development of Spanish composition skills and applied grammar. Compositions are assigned to develop specific writing skills and improve critical judgment. This course will further develop the appreciation of cultural diversity. The class is conducted primarily in Spanish.
Transfer Credit: CSU; UC

SPAN 206
HISPANIC LITERATURE
IN THE MEDIA 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: SPAN 201 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None. This course will examine the translation of various literary genres from different periods of Hispanic literature, both Peninsular and Latin American, into various audio/visual media. An exploration of how literature and audio/visual media create, shape, reinforce, and/or change culture and impact its images, stereotypes, and archetypes will be examined. Theoretical approaches to the adaptation of literature into other media will be studied.
Transfer Credit: CSU; UC

SPAN 210
HIGHLIGHTS OF
HISPANIC CULTURE 3 UNITS
Class hours: 3 lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Credit or “C” or higher.
This course traces the principal currents of Hispanic culture through Europe and the New World. Using a thematic approach, it traces the historic, political and economic development of the Spanish speaking people, and presents the highlights of Hispanic achievements from the standpoint of civilization and culture. This course, conducted primarily in Spanish, is recommended for Spanish majors.
Transfer Credit: CSU; UC

SPAN 213
LIVING SPANISH
GRAMMAR AND
WRITTEN COMMUNICATION 2 UNITS
(An intermediate course)
Class hours: 2 lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Credit or “C” or higher.
Study of fundamental grammatical principles and sentence structures with drills and translations. (Special emphasis on uses of the Subjunctive and the phonetic rules of the accent.) Writing of short compositions blending creativity with grammatical correctness. An excellent review course for all students. Recommended for Spanish majors.
Transfer Credit: CSU; UC

SPAN 214
LIVING SPANISH
GRAMMAR AND
WRITTEN COMMUNICATION 2 UNITS
(An intermediate course)
Class hours: 2 lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Credit or “C” or higher.
Study of fundamental grammatical principles and sentence structures with drills and translations. (Special emphasis on uses of the Subjunctive and the phonetic rules of the accent.) Writing of short compositions blending creativity with grammatical correctness. An excellent review course for all students. Recommended for Spanish majors.
Transfer Credit: CSU; UC

SPAN 223
SPANISH FOR HEALTH
AND MEDICAL CAREERS 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This Spanish course for health and medical personnel is designed for students who plan to use Spanish as a communication tool in their field of specialization. A major emphasis is on vocabulary and situational dialogues closely related to health and medical careers.
Transfer Credit: CSU

SPAN 245
INTRODUCTION TO CHICANO/
MEXICAN AMERICAN CULTURE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is a study of the culture of the Chicano/Mexican American student. It analyzes the family, religious institutions, contributions, advancements, and problems of
the Chicano/Chicana in the United States and aids students in achieving self-identification and understanding their relationship to their own community. This course, conducted in English, develops insight into the special nature of Chicano/Chicana culture for those outside that culture. It is open to all Spanish speaking and non-Spanish speaking students.  *Transfer Credit: CSU; UC*

**SPAN 281**  
BEGINNING CONVERSATIONAL SPANISH  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: SPAN 102 or equivalent with a grade of Credit or "C" or higher.  
This course provides the student practice in understanding and speaking Spanish as used in the home, school, business, travel and everyday life. Emphasis is placed on vocabulary, idioms, and language patterns fundamental to an active and practical use of Spanish. This course, recommended for all Spanish majors, develops the appreciation of cultural diversity.  
*Transfer Credit: CSU; UC*

**SPAN 282**  
INTERMEDIATE CONVERSATIONAL SPANISH  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: SPAN 281 or equivalent with a grade of Credit or "C" or higher.  
This course provides intensive practice in the discussion of current topics including multiculturalism. Emphasis is on the acquisition of special idioms and vocabulary suitable to conversation about the family, the world of work, business, sports and pastimes, popular culture, travel and ecology. This course, conducted primarily in Spanish, is recommended for all Spanish majors.  
*Transfer Credit: CSU; UC*

**SPAN 283**  
ADVANCED CONVERSATIONAL SPANISH  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: SPAN 282 or equivalent with a grade of Credit or "C" or higher.  
This course consists of in depth oral discussion of cultural topics, including modern family life, the job market, advertising in the business world, pastimes and amusements, economy versus ecology, the world of travel and multiculturalism. Emphasis is on the acquisition of appropriate vocabulary and language patterns, and the creative development of arguments. This course, conducted in Spanish, is recommended for all Spanish majors.  
*Transfer Credit: CSU; UC*

**SPEECH**  
(Liberal Arts Division)

**SPCH 30**  
(Not degree applicable)  
COMMUNICATION DISORDERS  
1 UNIT  
Class hours: 3 lecture/lab  
Prerequisite: None.  
This course is designed for students with a communication difficulty. Speech-Language-Hearing problems such as articulation, stuttering, voice disorders, regional or foreign dialects, language impairments due to a hearing loss are dealt with by individual or small group therapy. This course may be taken a maximum of 4 times. The course is to be offered on a credit/no credit basis.  

**SPCH 31**  
(Not degree applicable)  
COMMUNICATION DISORDERS  
1 UNIT  
Class hours: 3 lecture/lab  
Prerequisite: 4 units of SPCH 30 or equivalent with a grade of Credit or "C" or higher.  
This course is a continuation of individual and/or small group therapy for students with a communication difficulty, such as articulation, stuttering, voice disorders, regional or foreign dialects, language usage, and speech and language impairments due to hearing loss. It is a continuation of SPCH 30 for students who require further instruction. This course may be taken a maximum of 4 times. The course is offered on a Credit/No Credit basis.  

**SPCH 45**  
(Not degree applicable)  
SPEECH-COMMUNICATION FOR CAREERS  
1 UNIT  
Class hours: 1 lecture/1 lab  
Prerequisite: None.  
This course is a practicum in speech-communication within a career or occupational role. Theory will serve as a basis for the practical application of communication principles. Effective interaction with superiors, co-workers and the public is stressed.  

**SPCH 60**  
INTRODUCTION TO COMMUNICATION  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None.  
This course is designed for students who need an introductory course in oral communication. It will aid them in conversation, small group interaction, identification of speaking purposes, supporting ideas, and listening skills. Videotape is used as an evaluative tool.

**SPCH 100**  
FUNDAMENTALS OF ORAL COMMUNICATION  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Credit or "C" or higher.  
This survey course is an overview of the diversity of human communication. The student develops an understanding of the communication process, the basic elements of improving interpersonal communication, and how to reduce communication apprehension. Also included are leadership, small groups, intercultural communication, interviewing, and speech preparation. This course includes oral presentations, and videotaping is used as an instructional tool.  
*Transfer Credit: CSU; UC*  
*UC credit limits may apply. SPCH 100 and SPCH 132 combined: maximum credit, one course.*

**SPCH 110**  
INTERCULTURAL COMMUNICATION  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: ENGL 52 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the English Placement Process. Corequisite: None.  
Recommendation: None.  
This course presents theories and principles of communication with an emphasis on application of concepts relevant to intercultural communication. It has a culture general approach focusing on variables which influence the communication process. Assignments and activities involve students in the analysis of different communication patterns across cultures and the exploration and practice of methods, skills and techniques for improving intercultural communication.  
*Transfer Credit: CSU; UC*

**ANNOUNCEMENT OF COURSES**

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

---

SPCH 120  
FUNDAMENTALS OF INTERPERSONAL COMMUNICATION  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: ENGL 52 or equivalent with a grade of Credit or "C" or higher or satisfactory completion of the English Placement Process.  
Recommendation: None.  
The interpersonal communication course is an overview of theory and research on human communication. The course is designed with the opportunity to improve students communication skills in a variety of communication contexts. This course includes skill practices, oral presentations, and

---

308
videotaping as instructional tools.
Transfer Credit: CSU; UC

**SPCH 130** (CAN SPCH 4)
**FUNDAMENTALS OF SPEAKING** 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Credit or “C” or higher.
This course focuses on the student’s communication of ideas and concepts in various audience settings with emphasis on message organization, supporting amplifying materials, and analysis of audience diversity. Videotape is used as an evaluative tool.
Transfer Credit: CSU

**SPCH 132** (CAN SPCH 10)
**FUNDAMENTALS OF SMALL GROUP COMMUNICATION** 3 UNITS
Class hours: 3 lecture and evaluation
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
As an introduction to the fundamentals of group discussion, this course focuses on the individual’s communication in a small group setting; leadership in groups; group communication norms and processes with emphasis on problem solving and conflict reduction techniques. Videotape is used as an evaluative tool.
Transfer Credit: CSU; UC
*UC credit limits may apply. SPCH 100 and SPCH 132 combined: maximum credit, one course.

**SPCH 140**
**ORAL INTERPRETATION OF LITERATURE** 3 UNITS
Class hours: 3 lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Credit or “C” or higher.
This course focuses on the analysis and interpretation of both prose and verse literature, including study of voice production, structure and content of literature, and techniques of effective oral communication of meaning from the printed page.
Transfer Credit: CSU; UC

**SPCH 145**
**STORYTELLING** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is an introduction to the history of storytelling and the techniques of listening, preparation, and the presentation of stories to various age groups and in various settings. Students acquaint themselves with various literary genres--folk tales, sagas, epics, legends, myths, poetry, and drama. Videotape is used as an evaluative tool.
Transfer Credit: CSU

**SPCH 150**
**ORGANIZATIONAL COMMUNICATION** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: READ 54 or ENGL 52 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the English Placement Process.
This course presents theories and principles of communication with an emphasis on application of concepts relevant to organizational communication. This course focuses on variables that influence the communication process within the context of business and organizations. The combined application of speaking, listening, writing, and reading skills in business and professional settings will be emphasized. Assignments and activities involve students in the analysis of different communication patterns within organizations and the exploration and practice of methods, skills and techniques for improving communication within the professional setting.
Transfer Credit: CSU

**SPCH 160**
**PARLIAMENTARY PROCEDURE** 1 UNIT
Class hours: 2 lecture
Prerequisite: None.
This course entails an examination of principles, practices and procedures in formal deliberation. Emphasis is placed on parliamentary law.
Transfer Credit: CSU

**SPCH 165**
**GROUP PROCEDURE** 1 UNIT
Class hours: 2 lecture
Prerequisite: SPCH 160 or equivalent with a grade of Credit or “C” or higher.
This course addresses leadership functions, techniques of cooperative problem solving, types of organizations, creating new organizations, and informal deliberation.
Transfer Credit: CSU

**SPCH 200**
**CONTEMPORARY COMMUNICATION TOPICS** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 or READ 54 with a grade of Credit or “C” or higher or the equivalent.
This is a specialized course designed to present and acquaint students with communication theories and principles relevant to improving communication effectiveness. It focuses on those issues that reflect the evolutionary nature of communication in a variety of contemporary communication areas. The special topic will be decided by the course instructor and announced in the Schedule of Classes. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC credit determined after admission.

**SPCH 229**
**SPEECH AND LANGUAGE DEVELOPMENT IN CHILDREN** 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to provide the student an understanding of how speech and language develops in normal monolingual and bilingual children and what factors characterize language delay or a language disorder in children with special needs, including exposure to standardized tests and measures of language development. Practice will be provided in eliciting and analyzing speech/language samples from children representing native and non-native speakers and demonstrating normal and delayed speech/language skills. It is recommended for students majoring in speech pathology, the Speech-Language Pathology Assistant Program, elementary education, preschool or special education.
Transfer Credit: CSU

**SPCH 235** (CAN SPCH 6)
**FUNDAMENTALS OF ARGUMENTATION AND PERSUASION** 3 UNITS
Class hours: 3 lecture and evaluation
Prerequisite: Completion of ENGL 100 with a grade of Credit or “C” or higher.
This course focuses on argumentation and persuasion in the context of speech communication. This course examines the formation of arguments, the quality and types of evidence used to support claims, the use of language, and the analysis of fallacies. In addition, the course covers the role of the speaker/author, audience and message in argument. Emphasis is on the integration of critical thinking principles with techniques of effective argument, with focus on critiques, essays, debate, and speech writing and delivery.
Transfer Credit: CSU; UC
Announcement of Courses

SPCH 236
FORENSICS FOR
ONE TOURNAMENT 1 UNIT
Class hours: 1 lecture/2 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course provides students with opportunities to acquire basic oral communication, organizational, and research skills while gaining self-confidence and reducing speaking anxiety. Workshop includes competition at intercollegiate speech and debate tournaments. This course is recommended for all Speech majors. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

SPCH 237
FORENSICS FOR
TWO TOURNAMENTS 1 UNIT
Class hours: 1 lecture/2 lab
Open entry/open exit
Prerequisite: None.
Corequisite: SPCH 236.
Recommendation: None.
This course provides students with numerous opportunities to improve oral communication, organizational, and research skills while developing self-confidence and reducing speaking anxiety. Workshop includes competition at intercollegiate speech and debate tournaments, and may also include on-campus and/or community speaking opportunities. Emphasis is on student competition and events development. This course is recommended for all Speech majors. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

SPCH 238
FORENSICS FOR
THREE TOURNAMENTS 1 UNIT
Class hours: 1 lecture/2 lab
Open entry/open exit
Prerequisite: None.
Corequisite: SPCH 236 and SPCH 237.
Recommendation: None.
This course provides students with numerous opportunities to compete in multiple events at intercollegiate speech and debate tournaments, and also includes on-campus and/or community speaking opportunities. Intensive improvement of oral communication, organizational, and research skills is emphasized, along with commitment to participate in multiple facets of the program. This course, recommended for all Speech majors, develops scholarship, leadership, a strong team ethic, and an appreciation for the academic competitive experience. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

SPCH 239
FORENSICS WORKSHOP 2 UNITS
Class hours: 1 lecture, 3 lab
Prerequisite: None.
Any person anxious to develop verbal confidence is encouraged to enroll in the Forensic Workshop. Workshop includes speaking opportunities before audiences at Intercollegiate speech tournaments and community organizations such as Kiwanis, Lions, Rotary, etc. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

SPCH 240
ORAL INTERPRETATION:
READERS’ THEATRE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course offers further study of oral interpretation principles emphasizing dramatic literature through preparation and performance of a Readers’ Theater production. Videotape is used as an evaluative tool.
Transfer Credit: CSU; UC

SPCH 241
VOICE AND ARTICULATION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course is designed to help the student learn how voice and speech are produced by a study of anatomy and physiology of the speech and hearing mechanism and to learn how to use these mechanisms effectively and efficiently for oral communication. Students will learn phonetic transcription skills using the International Phonetic Alphabet (IPA) to assist their work on their own communication skills emphasizing precise articulation. Distinctive features of loudness, rate, pitch variation, vocal variety and controlled respiratory patterns will also be studied.
Transfer Credit: CSU

NON-CREDIT (ADULT EDUCATION) CLASSES

AED 90.32 (Not degree applicable)
COMMUNICATION DISORDERS 0 UNIT
Class hours: 3 lecture
Open entry/open exit
Prerequisite: None.
Limitation on enrollment: consultation by a certified speech pathologist. This course is for those students who have speech, hearing, language difficulties such as articulation problems, stuttering, voice disorders, regional or foreign dialects, and speech impairments due to hearing difficulties. This course provides individual or small group therapy. Students may enter the clinic at any time during the semester. (Formerly SPCH 32)
Transfer Credit: CSU

AED 90.46 (Not degree applicable)
INDIVIDUALIZED SPEECH 0 UNIT
Class hours: 3 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course explores topics in speech communications that are necessary for successful communication interactions to occur in college or community settings and, in the workplace. This course may not be taught every semester. (Formerly SPCH 46T)

SPEECH-LANGUAGE PATHOLOGY
(Health Occupations)

SLP 100
INTRODUCTION TO SPEECH AND
LANGUAGE PATHOLOGY 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 or equivalent with a grade of Credit or “C” or higher.
This course introduces foundational skills and principal theories for clinical management of individuals with communicative disorders. Linguistic and cultural variations will be explored. Legal and ethical scope of practice pertinent to roles in the speech-language pathology fields will be delineated.
Transfer Credit: CSU

SLP 110
NORMAL COMMUNICATION,
DISORDERS, AND DIFFERENCES 4 UNITS
Class hours: 4 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: A&P 120 or equivalent with a grade of Credit or “C” or higher.
This course focuses on normal verbal and non-verbal communication across the lifespan, including an understanding of how the different areas of language contribute to the total communication process. Students will learn what distinctive features constitute normal speech, language and hearing in a multicultural society. Observation techniques, assessment and intervention tools will be introduced.
Transfer Credit: CSU

SLP 120L
PHONETICS LAB 1 UNIT
Class hours: 3 lab
Prerequisite: SLP 100 or equivalent with a grade of Credit or “C” or higher.
Corequisite: SPCH 271.
Recommendation: None.
All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

310
This is a skills lab designed to provide the student with practice in phonetic transcription skills. Students will transcribe normal and disordered speech using the International Phonetic Alphabet (IPA) for broad transcription. Linguistic variations and regional dialects will be addressed. This course may be taken a maximum of 3 times.

*Transfer Credit: CSU*

**SLP 125**  
**CHILDHOOD DISORDERS AND TREATMENT**  
5 UNITS  
Class hours: 4 lecture/3 lab  
Prerequisite: SLP 100 and SLP 110 or equivalent with grades of Credit or "C" or higher.  
Corequisite: None.  
Recommendation: A&P 120 or equivalent with grade of Credit or "C" or higher.  
This course focuses on screening procedures and treatment interventions used for speech, language and hearing disorders in children in educational and healthcare settings. The student will learn to use observational checklists, administer screening assessment tests and complete related therapeutic protocol forms.

*Transfer Credit: CSU*

**SLP 230**  
**ADAPTIVE COMMUNICATION TECHNOLOGY**  
1.5 UNITS  
Class hours: 1.5 lecture/0.5 lab  
Prerequisite: Completion of SLP 100 or equivalent with grade of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
This course introduces the student to the needs of non-oral children and adults, as well as the preparation, use and maintenance of selected adaptive communication equipment. Emphasis is placed on the collaborative use of assistive equipment for speech, language and hearing disorders.

*Transfer Credit: CSU*

**SLP 245**  
**ADULT FIELD EXPERIENCE**  
2.5 UNITS  
Class hours: 5 lecture/6 lab  
Prerequisite: SLP 125L, SLP 240, and SPCH 229 or equivalent with grades of Credit or “C” or higher.  
Corequisite: None.  
Recommendation: None.  
The field experience will provide the student with the opportunity to perform speech-language pathology assistant responsibilities with adults under appropriate supervision.

*Transfer Credit: CSU*

**TECHNICAL MATHEMATICS**  
(For Additional Courses See Mathematics)  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: None  
This course is designed to introduce the student to the history and literature of the theatre from ancient times to the Renaissance. The role of theatre in human affairs will be explored, and particular attention will be given to the way theatre shapes—and is shaped by—the cultural, intellectual, and political forces of its time.

*Transfer Credit: CSU; UC*

**TM 50**  
**TECHNICAL MATHEMATICS**  
3 UNITS  
Class hours: 3 lecture  
Prerequisite: MATH 40 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the Math Placement Process.  
This course will cover basic arithmetic and algebra postulates, simplification techniques and applications as used in both computer software and hardware design. BASIC, a computer language, will be used to emphasize applications in technology.

*Transfer Credit: CSU; UC*

**TM 54**  
**MATHEMATICS FOR COMPUTER TECHNOLOGY**  
4 UNITS  
Class hours: 4 lecture  
Prerequisite: MATH 40 or equivalent with a grade of Credit or “C” or higher or satisfactory completion of the Math Placement Process.  
This course will cover basic arithmetic processes using binary, octal and hexadecimal numbering systems. Systems of binary code such as BCD and ASCII will be introduced. There is an extensive coverage of Boolean algebra postulates, simplification techniques and applications as used in both computer software and hardware design. BASIC, a computer language, will be used to emphasize applications in technology.
be given to the way theatre shapes—and is shaped by—the cultural, intellectual, and political forces of its time.

Transfer Credit: CSU; UC

TH 104
HISTORY AND APPRECIATION OF MUSICAL THEATRE  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course introduces the student to the history and literature of the musical theatre from mid-19th century to present day. The course will explore the stylistic distinctions found in the musical as well as its social and cultural significance. Emphasis is placed on the contributions and influence of the individual writer, composer, or lyricist.

Transfer Credit: CSU; UC

TH 105
INTRODUCTION TO MUSICAL THEATRE TECHNIQUES  3 UNITS
Class hours: 2 lecture/2 lab, plus 2 hrs arr.
Prerequisite: None.
This course introduces the student to performance and audition techniques for musical theatre. Emphasis is placed on character development through scene study and song analysis, as well as vocal production and psychomotor awareness exercises. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 106
IMPROVISATION FOR THE THEATRE  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
In this course, students will learn how to act without a script. The focus will be on improvisational performance, but students will also learn how improvisation is used in actor training and as a tool for rehearsing traditional plays. Class members will participate in exercises designed to free their natural ability in all acting situations. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

TH 109
REMTOWNING A PRODUCTION  2 UNITS
Class hours: 1 lecture/4 lab
Prerequisite: TH 130A or TH 130B or TH 130C or audition or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
Students in this course will remount a major theatrical production. This particular course is for those cast in a show previously produced. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

TH 110  (CAN DRAM 8)
FUNDAMENTALS OF ACTING  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
This course is an introduction to acting methods and exercises. It is appropriate for the beginner, but it also lays a strong foundation for students who would like to pursue a career in acting. Students will perform regularly on stage, and will learn to analyze scenes and monologues. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

TH 111  (CAN DRAM 22)
INTERMEDIATE ACTING TO CHARACTERIZATION  3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: TH 110 or equivalent with a grade of Credit or “C” or higher.
This is an advanced course in acting methods and practices, with particular focus upon creating exciting, believable characters. Students will learn to find elements from their own lives to use in characterization, and then to explore cultures and walks of life other than their own.

Transfer Credit: CSU; UC

TH 112
STAND-UP COMEDY  3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
This is a complete course in stand-up comedy from material development to performance. The student will create a comic persona, write several routines, and perform these routines at venues both on-and off-campus. Field trips to local comedy clubs will be arranged. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

TH 113
THEATRE STAGECRAFT  3 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: None.
Theatre Stagecraft introduces the student to the tool usage, materials selection, and fabrication in scene shop procedures and practices, safe tool usage, materials selection, and fabrication methods.

Transfer Credit: CSU; UC

TH 114
VOICE FOR ACTING  2 UNITS
Class hours: 2 lecture/1 lab
Prerequisite: None.
This course presents vocal techniques to free and develop the actor’s voice. It includes exercises in relaxation, physical awareness, and proper breathing, as well as in the development of diction, range and projection as required for theatrical performance.

Transfer Credit: CSU; UC

TH 115
STAGE MOVEMENT AND COMBAT  3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
This is an introduction to basic stage movement and combat for the actor. Emphasis will be placed on physical and spatial awareness, using movement creatively in characterization, and developing confidence in the physical self. Various stage combat techniques will be covered so that students can fully choreograph their own stage fights. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

TH 117
REHEARSAL AND PERFORMANCE FOR THE MINOR ROLE  1 UNIT
Class hours: 0.5 lecture/2.5 lab
Prerequisite: By audition.
Recommendation: None.
Students in this course will rehearse and perform a major theatrical production. Students should contact the Theatre Department for a schedule of audition dates. This particular course is for those cast in “minor” roles. The course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 130
REHEARSAL AND PERFORMANCE FOR THE SUPPORTING ROLE  2 UNITS
Class hours: 1 lecture/4 lab
Prerequisite: By audition.
Corequisite: None.
Recommendation: None.
Students in this course will rehearse and perform a major theatrical production.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

Students should contact the Theatre Department for a schedule of audition dates. This particular course is for those casts in “supporting” roles. The course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 132
REHEARSAL AND PERFORMANCE
FOR THE LEADING ROLES 3 UNITS
Class hours: 1 lecture/7 lab
Prerequisite: By audition.
Students in this course will rehearse and perform a major theatrical production. Students should contact the Theatre Department for a schedule of audition dates. This particular course is for those cast in “major” roles. The course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 133
STAGE CREW ACTIVITY 1 UNIT
Class hours: 0.5 lecture/2.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to backstage crew skills and duties in connection with the mounting of college plays. The student will be assigned to running or preparation crews as scenery, lighting, costumes, sound, props, makeup, or house management. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 134
TECHNICAL PRODUCTION 2 UNITS
Class hours: 1 lecture/5 lab
Prerequisite: None.
This course introduces the student to technical theatre work in connection with the mounting of college plays. Emphasis is on the design and preparation of scenery, lighting, costume, sound, props, and makeup. Students may also be assigned to a running crew for some of their lab hours. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 136
TOURING THEATRE PRODUCTION
FOR SUPPORTING ROLES 2 UNITS
Class hours: 1.5 lecture/1.5 lab
Prerequisite: By audition.
In this course students in supporting roles prepare one-acts plays, “story theatre” programs, or improvisational performances, which are taken on tour and performed for the community. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

TH 137
TOURING THEATRE PRODUCTION
FOR LEADING ROLES 2 UNITS
Class hours: 1.5 lecture/2.5 lab
Prerequisite: By audition.
Corequisite: None.
Recommendation: None.
In this course students in leading roles prepare one-acts plays, “story theatre” programs, or improvisational performances, which are taken on tour and performed for community organizations and schools. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 140
THEATRE DANCE—BEGINNING JAZZ 2 UNITS
Class hours: 4 studio hours
Prerequisite: None.
This course is an introduction to jazz dance techniques and styles. Emphasis is on mastering the fundamental skills basic to jazz dance technique and artistic performance. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

TH 141
THEATRE DANCE—INTERMEDIATE JAZZ 2 UNITS
Class hours: 4 studio hours
Prerequisite: TH 140 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of the development of jazz dance techniques and style begun in TH 140. Emphasis is on mastery of more complicated jazz dance combination patterns and their performance. This course may be taken a maximum of 24 times.

Transfer Credit: CSU; UC

TH 142
THEATRE DANCE—BEGINNING TAP 2 UNITS
Class hours: 4 activity
Prerequisite: None.
This course is an introduction to basic tap dance techniques and styles. Emphasis is on mastery of basic tap dance steps, rhythms, combination patterns and their performance. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 143
THEATRE DANCE—INTERMEDIATE TAP 2 UNITS
Class hours: 4 activity
Prerequisite: TH 142 or equivalent with a grade of Credit or “C” or higher.
This course is a continuation of the development of tap dance techniques and style begun in TH 142. Emphasis is on mastery of more complicated tap dance steps, rhythms, combination patterns and their performance. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 145
COSTUME PRODUCTION
FOR DANCE 1 UNIT
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course introduces the student to the fabrication of costume elements including patterning, machine sewing, hand sewing, dyeing, and decoration for dance. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 146
MUSICAL THEATRE PRODUCTION
FOR CHORUS 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: By audition.
Corequisite: None.
Recommendation: None.
This course involves participation in a major Theatre Department musical production as a member of the chorus. Activities may include singing, dancing, acting and/or playing a musical instrument. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 147
MUSICAL THEATRE PRODUCTION
FOR LEADING ROLES 3 UNITS
Class hours: 1 lecture/7 lab
Prerequisite: By audition.
This course involves participation in a major Theatre Department musical production in a leading role. Activities will include singing, dancing, acting and/or playing a musical instrument. This course may be taken a maximum of 4 times.

Transfer Credit: CSU; UC

TH 150
APPRECIATION AND HISTORY
OF THE MOTION PICTURE 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This course examines the art of motion pictures and their impact upon society. It includes the viewing and critical analysis of feature films in various thematic categories.

Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
TH 151
MOTION PICTURES, RADIO
AND TELEVISION 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
This is a broad survey of the history, theory, and production techniques of motion pictures, radio, and television, with emphasis on the form, content, and social impact of each. Students will participate in at least one field trip to a motion picture, radio, or television studio. (This course is not open to students currently enrolled in or who have completed RTV 151)
Transfer Credit: CSU

TH 153
MOTION PICTURE PRODUCTION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
This is an introductory course in the elements of motion picture production. Students create short films in the Super 8 mm. format.
Transfer Credit: CSU

TH 156
TELEVISION PRODUCTION 2.5 UNITS
Class hours: 1 lecture/5 lab
Prerequisite: None.
This class provides practice in basic television production and video post-production. The focus will be on field video production and digital editing using Final Cut Pro. Students will do exercises, individual and team projects, learn about producing, directing, camera operation, and post-production. Qualified projects will be aired on cable as Cerritos College Campus TV programming. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

TH 159
WORLD FILM 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 52 or ENGL 155 or equivalent with a grade of Credit or "C" or higher.

TH 160
GREAT FILM DIRECTORS 3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.

TH 193
MOTION PICTURE EDITING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will serve as an introduction to motion picture editing by taking students through the history of editing and analysis of specific techniques through in class examples of significant works. Students will apply their knowledge of editing techniques through exercises on non-linear editing tools where they will edit their own versions of scenes from common footage.
Transfer Credit: CSU

TH 212
SCENE STUDY 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: TH 110 or equivalent with a grade of Credit or "C" or higher.

TH 213
HISTORICAL STYLES OF ACTING 3.5 UNITS
Class hours: 3 lecture/2 lab
Prerequisite: TH 110 or equivalent with a grade of Credit or "C" or higher.
In this course students will learn acting methods and styles needed to perform in plays written before the 19th century. These may include plays from ancient Greece, Commedia dell’Arte, Shakespeare and his contemporaries, the Spanish Golden Age, English Restoration, French neoclassicism, Moliere, and 18th century authors of various nationalities. Students will also explore vocal production, movement patterns, costumes, and social modes and manners for each period study.
Transfer Credit: CSU; UC

TH 216
ACTING FOR THE CAMERA 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: TH 110 or equivalent with a grade of Credit or "C" or higher.
Corequisite: None.
Recommendation: None.
This course is designed for the experienced acting student to adapt stage acting techniques for the motion picture and television camera. Emphasis will be placed on gaining an understanding of camera shots, angles, the shooting process, auditioning and actor behavior in front of the camera. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

TH 221
COSTUMING FOR THE STAGE 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course introduces the student to the principles and methods of costume crafts for stage purposes. Although design and construction are accentuated, the approach to costuming for the stage is underscored by an historical perspective. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

TH 222
STAGE LIGHTING (CAN DRAM 10) 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: None.
This course introduces the student to the theory and practice of modern stage lighting. Emphasis is placed on the design and function of lighting equipment and control systems, as well as color theory, the historical perspective, and hands-on experience.
Transfer Credit: CSU; UC

TH 226
INTRODUCTION TO SCENIC DESIGN 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This course introduces the student to the basic principles and techniques of scenic design for the theatre. The class will be involved in the conceptualization, analysis, and actual exploration of the design process. Emphasis will be placed on the development of the individual’s design capabilities and knowledge of contemporary design approaches.
Transfer Credit: CSU; UC

TH 241
SCREENWRITING 3 UNITS
Class hours: 3 lecture
Prerequisite: ENGL 52 or equivalent with a
grade of Credit or "C" or higher.

This course provides an opportunity for students to develop a screenplay for television or motion pictures. Students learn the craft of screenwriting by studying published scripts, movies, and TV shows and by writing synopses, treatments scenes, and a production-worthy screenplay. This course may be taken a maximum of 2 times. (Formerly TH 258)

Transfer Credit: CSU

TH 254
ADVANCED MOTION PICTURE
PRODUCTION 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: TH 153 or equivalent with a grade of Credit or "C" or higher.
This is an advanced course in the elements and practice of motion picture production in super 8mm film. Students create and direct advanced motion picture projects.
Transfer Credit: CSU

TUTORIALS

PLEASE SEE NON-CREDIT (ADULT EDUCATION) CLASSES ON PAGE 317

ITYPING/KEYBOARDING

SEE BCOT

(Business Computerized Office Technologies)

WELDING

(Technology Division)

WELD 39 (Not degree applicable)
WELDING SHOP MATH 2 UNITS
Class hours: 2 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to familiarize the student with the shop math typical to the welding industry. Emphasis will be placed on the practical applications of measuring, measuring instruments, area, volume, fractions, decimals and the metric system.

WELD 43/44 (Not degree applicable)
WELDING OCCUPATIONAL WORK EXPERIENCE 3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Welding work experience 73 or 20 hours of employment per week for Welding work experience 74. The employment must be in a job related to the student's educational goal.

WELD 50
BLUE PRINT READING FOR THE WELDING TRADES 3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course is designed to enable the student to read and interpret shop and structural drawings and prints. Emphasis is placed on structural shape identification, nomenclature, and symbols.

WELD 51L
ADVANCED ARC
WELDING SPECIALTY LAB 1 UNIT
Class hours: 3 lab
Prerequisite: WELD 100 or equivalent with a grade of Credit or "C" or higher, or concurrent enrollment.
Corequisite: WELD 210L or prior completion with a grade of Credit or "C" or higher.
Recommendation: None.
This advanced level welding course is designed to further develop advanced specialized welding skills in the structural, piping, sheet metal, and construction industries. This course may be taken a maximum of 4 times.

WELD 52
PIPE WELDING FUNDAMENTALS 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WELD 210L or equivalent with a grade of Credit or "C" or higher
Recommendation: Current Los Angeles City or AWS certification for structural steel.
This advanced welding course is designed to utilize previously acquired welding skills and techniques on ferrous pipe in the rotated and fixed positions. Emphasis is placed on the welding of open groove pipe joints using the shielded metal arc welding (SMAW) process.

Subjects covered will include joint preparation, alignment techniques, pre-heat and inter-pass temperatures, and post-heat requirements. Pipe flanges and fittings will be identified as to alloy content and applicable welding procedures.

WELD 53
PIPE LAYOUT 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WELD 120 or equivalent with a grade of Credit or "C" or higher, or appropriate work experience.
This advanced welding course emphasizes practical techniques of pipe layout, terminology, use of layout tools, fittings, offset tie-ins, and rolled offset tie-in of parallel pipelines. Instruction in more advanced layout techniques will cover layout of calculated fittings involving pipelines of unequal sizes and compound offset tie-in fittings.

WELD 54L
ADVANCED PIPE WELDING 2 UNITS
Class hours: 6 lab
Prerequisite: WELD 52 or equivalent with a grade of Credit or "C" or higher.
This is a course designed to refine the student's previously acquired pipe welding skills and prepare the student to pass a certification test in pipe welding. Emphasis is placed on welding ferrous pipe in the horizontal fixed (5G), vertical fixed (2G), and 45 degree inclined (6G) positions using the shielded metal arc (SMAW) and gas metal arc (GMAW) welding procedures. This course may be taken a maximum of 4 times.

WELD 55
MAINTENANCE WELDING 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WELD 100 and WELD 120 or equivalent with grades of Credit or "C" or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This advanced course develops the techniques of maintenance welding including terminology, metal identification, heat treating, and welding of dissimilar metals. Emphasis is placed on following welding procedures as they relate to the job.

WELD 100
WELDING FUNDAMENTALS 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
This introductory course is designed to familiarize the student with the principles and practices of the welding industry. Emphasis is placed on technical and practical applications of shielded metal arc, oxy-acetylene, gas metal...
arc, and gas tungsten arc welding processes as well as safety, weld testing, and the effects of heat on metals.

**Transfer Credit: CSU**

**WELD 200**

**INTERMEDIATE ARC WELDING**

**4 UNITS**

Class hours: 2 lecture/6 lab

Prerequisite: WELD 120 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.

Corequisite: None.

This course is designed to further the student's previously acquired welding skills and prepare the student to pass welding certification tests. Emphasis is placed on welding in the vertical and overhead positions and the welding of alloy steels with compatible filler metals using the gas metal arc welding process (GMAW), gas metal arc welding (GMAW), and flux cored arc welding (FCAW) processes. Related classroom instruction is given in the technical data pertaining to these processes.

**Transfer Credit: CSU**

**WELD 210L**

**ARC WELDING APPLICATIONS**

**2 UNITS**

Class hours: 6 lab

Prerequisite: WELD 200 or equivalent with a grade of Credit or “C” or higher.

This advanced welding course is designed to prepare the student welder for structural steel welding certifications using the SMAW (Shielded Metal Arc Welding) and FCAW (Flux Cored Arc Welding) processes. This course may be taken a maximum of 3 times.

**Transfer Credit: CSU**

**WELD 220**

**CERTIFICATION AND LICENSING FOR WELDERS**

**2 UNITS**

Class hours: 2 lecture

Prerequisite: None.

Corequisite: None.

Recommendation: WELD 200 or equivalent with a grade of Credit or “C” or higher, or concurrent enrollment, or appropriate work experience.

This is a technical course for the advanced welding student. Material covered will include data on all approved modern welding processes, welding filler metals, approved weld joint design, and welding procedures. Special emphasis will be placed on welding symbols and American Welding Society (AWS) Structural Code specifications leading to Los Angeles City and AWS welding certifications.

**Transfer Credit: CSU**

**WELD 240**

**ADVANCED GAS TUNGSTEN ARC WELDING LABORATORY**

**2 UNITS**

Class hours: 6 lab

Prerequisite: WELD 130 or equivalent with a grade of Credit or “C” or higher.

This is an advanced welding course using the gas tungsten arc welding (GTAW) process. This course is designed to further the skills of the student in this process. Special emphasis is placed on the welding of ferrous and non-ferrous metals in the vertical position. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**WELD 250L**

**GAS TUNGSTEN ARC WELDING APPLICATIONS**

**2 UNITS**

Class hours: 6 lab

Prerequisite: WELD 240 or equivalent with a grade of Credit or “C” or higher.

This advanced course is designed to further increase the manipulative skills and technical knowledge of the student welder using the gas tungsten arc welding (GTAW) process on .020” to .030” thickness metals as well as welding the root bead on high pressure pipe. All welding samples will comply with standards set by the American Welding Society or industry. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**WELD 270**

**STRUCTURAL FABRICATION**

**3 UNITS**

Class hours: 2 lecture/3 lab

Prerequisite: WELD 50 or WELD 170 or equivalent with a grade of Credit or “C” or higher.

Corequisite: None.

Recommendation: WELD 39 and WELD 50 or equivalent with grades of Credit or “C” or higher.

This advanced course is designed to further develop layout skills on structural plate, beams, channel, and angle iron. The student will work from prints utilizing measuring tools and fabrication equipment to develop weldments typical in the industry.

**Transfer Credit: CSU**

**WOMEN’S STUDIES**

(Humanities and Social Sciences Division)

**WS 101**

**ISSUES FOR WOMEN IN AMERICAN SOCIETY**

**3 UNITS**

Class hours: 3 lecture

Prerequisite: None.

Corequisite: None.

Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or “C” or higher and satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.

Issues for Women in American Society is a
WS 102
WOMEN AND RELIGION  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This course is a multidisciplinary course that investigates women's religious lives. It will center around the writing of women's experiences within world religions. The course will include such issues as identity, women's religious leadership, language and liturgy, rituals performed by women and sacred texts. Students will learn about world religions generally, and women's lives in these religions specifically.
Transfer Credit: CSU; UC

WS 103
WOMEN, THEIR BODIES AND HEALTH  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course will examine contemporary women's health issues and body image concerns. General topics will include images of women, lifespan changes, mental health, eating disorders, prevention of abuse and self-harm, social roles, sexual identity and sexuality, relationships, birth control and pregnancy. Current research on cardiovascular disease, cancer and other chronic conditions will be discussed as they pertain to women's issues. Students will develop the skills necessary to become wiser consumers of health and beauty-enhancing products. (This course is not open to students currently enrolled or who have completed HED 103)
Transfer Credit: HED

WS 204
WOMEN IN AMERICAN HISTORY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: Satisfactory completion of an American history survey course, the Reading Placement Process or READ 54, and the English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher.
This lecture/discussion course will survey women's history in the United States from colonial times to present. It will focus on defining the similarities and differences in historical experiences of women based on their social class, race, and ethnicity. Topics of concentration include the changing roles of women in the private and public spheres; an analysis of the agendas, strategies, and consequences of the women's movements; and the historical evolution of the definitions of feminism and social construction of gender. This course is not open to students who are enrolled in or have received credit in HIST 204.
Transfer Credit: CSU; UC

WS 205
THE ANTHROPOLOGY OF SEXUALITY AND GENDER  3 UNITS
Class hours: 3 lecture
Prerequisite: Student must be at least 18 years of age or have parental consent in order to take this course.
Corequisite: None.
Recommendation: Satisfactory completion of English Placement Process or ENGL 52 or equivalent with a grade of Credit or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Credit or "C" or higher.
This course examines the cultural connection of human sexuality and gender in an anthropological framework. Biological and cultural bases for the multiple expressions of sexuality and gender found around the world and presented. Case studies include food foraging, horticultural, agricultural, industrial, and post-industrial societies. A central concern is the interaction between subsistence practices, cultural economics, and status in the in the construction of "normal" and "abnormal" sexualities and genders. This course is not open to students who are enrolled in ANTH 205 or have received credit in ANTH 205.
Transfer Credit: CSU

WS 206
WOMEN IN THE GLOBAL ECONOMY  3 UNITS
Class hours: 3 lecture
Prerequisite: None.
Corequisite: None.
Recommendation: ENGL 100.
This course is an introduction to the global economy from the perspectives of women in the Third World. Drawing from various disciplinary fields such as economics, history, political science, anthropology and postcolonial studies, it examines critically the processes of globalization that impact the multiple identities and oppressions which shape women's lives with respect to race, gender, class, and culture. This course studies the consequences of strategies of modernization and neocolonialism employed by economic development such as the World Bank and International Monetary Fund (IMF) on the lives of women in the developing countries and the surrounding ecological environment. This course is not open to students who have received credit in ECON 102.
Transfer Credit: CSU; UC

WOODWORKING MANUFACTURING TECHNOLOGIES
(Technology Division)

WMT 1 (Not degree applicable)
OPEN ENTRY/EXIT WOODWORKING  0.5 UNIT
Class hours: 3 hrs. arr.
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This open entry/exit course is designed to provide between semester access to the woodworking program for students to develop, enhance, and refine their woodworking skills. Students are accepted into existing courses on a space-available basis dependent on the students' skills and needs and can exit when their individual goals have been met. This course is intended to facilitate basic fundamental skills for entry level employment.

WMT 43/44 (Not degree applicable)
WOODWORKING MANUFACTURING TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE  3-4 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Woodworking Manufacturing work experi-
experience 73 or 20 hours of employment per week for Woodworking Manufacturing work experience 74. The employment must be in a job related to the student's educational goal.
Corequisite: Enrollment in 7 or more units, including Woodworking Manufacturing Occupational Work Experience, in a declared technology major. Three units of Woodworking Manufacturing Occupational Work Experience requires 180 non-paid hours of work or 225 paid hours of work per semester.
Work experience/career internship provides the opportunity for Woodworking Manufacturing Technology students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. These courses may be taken for a maximum of 4 times.

WMT 101
INTRODUCTION TO WOODWORKING 3 UNITS
Class hours: 2.5 lecture/2 lab
Prerequisite: None.
This introductory woodworking course acquaints the student with the essential principles of woodworking. Topics include wood technology, use of hand tools, portable power tools, and basic machinery. Emphasis is placed on proper technique, safety, and shop policies for the woodworking facility.
Transfer Credit: CSU

WMT 102
INTRODUCTION TO SOLID WOOD CASEGOODS 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 101 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This intermediate course increases the student’s skill in the use of hand tools, portable power tools, and machinery. Topics include project planning and implementation, wood technology, and hand and machine joinery as it pertains to solid wood construction in free-standing furniture casework. Emphasis is placed on proper technique, safety, and shop policies for the woodworking facility. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 103
INTRODUCTION TO TABLES 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 101 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course introduces the student to the fundamentals of wood carving relative to wood furniture. Topics include chip carving, letter carving, shallow relief carving, and carving the Newport Shell. Emphasis is placed on the selection and safe use of tools, carving techniques, choice of wood, and wood finishes. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 107
WOOD FINISHING 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
This course is designed to enable the student to understand the functions of equipment used in industrial finishing operations. The basic chemistry of lacquers, enamels, stains and glazes will be covered. Instruction and practice will include the use of brushes and the spray gun in coating various materials with emphasis on wood. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 108
WOOD CARVING FOR FURNITURE 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to the fundamentals of wood carving relative to wood furniture. Topics include chip carving, letter carving, shallow relief carving, and carving the Newport Shell. Emphasis is placed on the selection and safe use of tools, carving techniques, choice of wood, and wood finishes. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 111L
INTRODUCTION TO WOODWORKING LAB 1 UNIT
Class hours: 3 lab
Prerequisite: WMT 101 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This laboratory course provides students who have completed WMT 101 the opportunity to hone and refine skills and complete projects required in the prerequisite course. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 117
WOODWORKING AND ARCHITECTURAL ENVIRONMENTS 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course explores the cultural and historical woodworking and architectural environments of the Los Angeles region and beyond. Tours of lumberyards, lumber mills, woodworking shops, manufacturing plants, private homes, museums, design showrooms, and other facilities will be held. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

WMT 118
INTRODUCTION TO WOODTURNING 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: None.
Corequisite: None.
Recommendation: WMT 101 and WMT 102 or WMT 103 or equivalent with grades of Credit or “C” or higher.
This course introduces students to the methods, tools, materials, and machinery used in woodturning. Students have the opportunity to create turned projects using the woodturning lathe. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 119L
INTRODUCTION TO WOODTURNING LAB 1 UNIT
Class hours: 4 lab
Prerequisite: WMT 118 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This laboratory course provides students who have completed WMT 118 the opportunity to improve and refine their woodturning skills in order to prepare them for advanced woodturning courses. This course may be taken for a maximum of 4 times.
Transfer Credit: CSU

WMT 130
FURNITURE DESIGN 3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course is designed to introduce the student to the process of furniture design. Topics include conceptualization, drawing, engineering, ergonomics, style and mock-ups. This course may be taken a maximum of 2 times. 
Transfer Credit: CSU

WMT 132
CHAIR DESIGN
AND CONSTRUCTION 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is a course in chairmaking for the advanced Woodworking Manufacturing Technology student. It includes the basic techniques of design, construction and production of chairs. The student will design and build both wood and exposed wood frame chairs. This course may be taken a maximum of 4 times. 
Transfer Credit: CSU

WMT 134
FRAME MAKING 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 103 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course introduces the fundamental principles and techniques of frame making for upholstered furniture. Topics include design, engineering, layout, machine woodworking and frame assembly. This course may be taken a maximum of 4 times. 
Transfer Credit: CSU

WMT 137
OUTDOOR FURNITURE 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: WMT 101 and WMT 102 or WMT 103 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course instructs students in the design and construction of outdoor furniture. Projects include tables, chairs, benches, lounges, stands and umbrellas. This course may be taken a maximum of 4 times. 
Transfer Credit: CSU

WMT 144
JIGS AND FIXTURES 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WMT 101 or WMT 151 or WMT 153 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience. This course introduces students to jigs and fixtures associated with various machinery and processes in the woodworking lab. Topics include machinery tune-up, jig and fixture design, measurement, materials, hardware, construction techniques, dust collection, and safety. This course may be taken a maximum of 2 times. 
Transfer Credit: CSU

WMT 148
FURNITURE MAKING AND MANUFACTURING 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 103 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course teaches basic elements of production furniture design, prototype building, and product evaluation. The course acquaints the student with all phases of furniture production as a profession. Students design, build, and test market furniture samples from which items will be selected for manufacturing in the Production Furniture Making and Manufacturing course (WMT 24.8). This course may be taken a maximum of 4 times. 
Transfer Credit: CSU

WMT 151
INTRODUCTION TO FACEFRAME CABINETMAKING 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces the student to the methods, materials, tools, and machinery used in the construction to traditional faceframe cabinetry. Classroom topics will include the history, design, fabrication, and safe use of woodworking machinery and materials involved in cabinet construction. This course may be taken a maximum of 4 times. 
Transfer Credit: CSU

WMT 153
32MM SYSTEM OF CABINETMAKING 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: None.
Corequisite: None.
In this course, the student learns the foundational information and skills related to the 32mm system of cabinet manufacturing. It includes review of the system with hands-on experience in product design and layout of boring patterns, including machine operation in building 32mm cabinets. This class may be taken a maximum of 2 times. 
Transfer Credit: CSU

WMT 154
INTRODUCTION TO CABINET INSTALLATION 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: WMT 151 or WMT 153 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course introduces the student to the methods, materials, fasteners, hardware and tools used to install residential, commercial and institutional cabinets. Classroom topics include reading of blueprints, layout, leveling, scribing, milling, fitting and fastening cabinets into place. A major emphasis will be on the safe use of tools and materials involved in cabinet installation. This course may be taken a maximum of 2 times. 
Transfer Credit: CSU

WMT 155
ARCHITECTURAL MILLWORK 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 151 or equivalent with a grade of Credit or “C” or higher or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course introduces the student to the methods, materials, tools, and machinery used in the manufacturing and installation of architectural millwork. Classroom topics include the history, design, fabrication, installation, and safe use of woodworking machinery and materials involved in architectural millwork and finished carpentry. This course may be taken a maximum of 4 times. 
Transfer Credit: CSU

WMT 157
PASSAGE DOOR 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 102 or WMT 103 or WMT 151 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: WMT 155.
This course introduces the student to the methods, materials, tools, and machinery used in the design, manufacturing, and installation of passage doors. Classroom topics include the history, design, milling, assembly, and installation of doors. A major emphasis will be on the safe use of woodworking machinery and materials involved in door millwork. This course may be taken a maximum of 2 times. 
Transfer Credit: CSU
Announcement of Courses

WMT 159
SOLID SURFACE FABRICATION  4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: WMT 101 or WMT 151.
This course introduces the student to the methods, materials, tools, and machinery used in the design, manufacturing, and installation of solid surface countertops, as well as the safe use of specialized machinery and materials involved in solid surface fabrication.
This course will prepare students for solid surface fabrication industry certification/qualification. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 171
INTRODUCTION TO WOODEN BOAT BUILDING  3 UNITS
Class hours: 2 lecture/4 lab
Prerequisite: WMT 101 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: WMT 103 or equivalent with a grade of Credit or “C” or higher.
This course is an introduction to the methods and materials used in the construction of modern and traditional wooden boats. Classroom topics include the history, design, engineering, and safe use of woodworking techniques and materials involved in wooden boat construction. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 181
INTRODUCTION TO COMPUTER OPERATIONS FOR CABINETMAKING AND DESIGN  3 UNITS
Class hours: 3 lecture/1 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to the CabinetWare® computer aided cabinet design and manufacturing program. Topics include utilization of the software to design and manufacture cabinets, details of design standards, variables, and parameters, as well as industry drawings, contract, proposals, materials, and cut lists. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 201
WOODWORKING WITH HAND TOOLS  4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces students to the hand tools used in woodworking. Topics include sharpening, tool identification, wood technology and hand plane adjustment for optimum performance. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 202
ADVANCED SOLID WOOD CABINETY  4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 102, WMT 103 and WMT 201 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This advanced course covers the design and building of museum quality solid wood cabinets. Topics include the aesthetics of design, making scale mockups, selection of grain and color to complement the design, and advanced joinery techniques. Coopering, bent laminating, and basic veneering are also covered. Emphasis is placed on the highest degree of workmanship and design. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 203
WOOD VENEERING  4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 102 or WMT 103 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course introduces the student to the methods, materials, tools, and machinery used to process wood veneers. Topics include material identification, veneer selection, pattern layout, substrate selection, and clamping methods used to lay-up veneer on various types and shapes of substrates. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 204
THE WORKBENCH CLASS  4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides the student with the background and skills required to research, design, purchase materials, select hardware, and manufacture a workbench. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 212
ROUTERS AND ROUTER TABLES  4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 101 or WMT 151 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: WMT 102 or WMT 103 or equivalent with a grade of Credit or “C” or higher.
In this course students will design and manufacture “The Ultimate Router Table.” The router table is one of the most versatile and essential pieces of equipment for any woodworker. Course topics include comparison and evaluation of routers available on the market, design, construction, and use of jigs and fixtures. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 218
POLYCHROMATIC AND CLOSED FORM TURNING  3 UNITS
Class hours: 1.5 lecture/4.5 lab
Prerequisite: WMT 101 and WMT 118 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: WMT 102 or WMT 103.
This advanced woodturning course is designed to enhance students’ skills. Topics include polychromatic bowl construction, closed form vessel turning and other advanced skills. This course may be taken a total of 2 times.
Transfer Credit: CSU

WMT 219L
WOODTURNING LAB  1 UNITS
Class hours: 4 lab
Prerequisite: WMT 101 and WMT 118 and WMT 218 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: WMT 102 or WMT 103.
This course allows students to perfect and hone skills acquired during previous woodturning courses. In this lab, students will design and construct woodturning projects of their choice that are relevant to the subject matter being taught during the same time period. This course may be taken a maximum of 6 times.
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
WMT 228L
PROJECT COMPLETION LAB 2 UNITS
Class hours: 1 lecture/3 lab
Prerequisite: WMT 102 or WMT 103 or WMT 151 or WMT 153 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides students with the necessary time and facility to continue working on a project to completion. Instruction is project specific with emphasis on problem solving and detail. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 229L
COMPREHENSIVE WOODWORKING MANUFACTURING SPECIALTY 2.5 UNITS
Class hours: 8 lab
Prerequisite: WMT 102 or WMT 103 or WMT 151 or WMT 153 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course allows students to perfect and hone skills acquired during previous comprehensive woodworking courses. In this lab, students will design and construct a project of their choice that is relevant to the subject matter being taught. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 233
MORRIS CHAIR 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 101, WMT 102 and WMT 132 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course in furniture making will challenge and improve the student's skills through the manufacturing of a historical chair, the Morris chair. Hand tools, machinery and hand power tools are used in an advanced setting. Topics include planning, manufacturing, utilizing solid wood joinery, complex laminations, subassembly and final assembly as well as finishing. The class focuses on the history and design of the Morris Chair, the first recliner. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 235
WINDSOR CHAIR 3 UNITS
Class hours: 2 lecture/3 lab
Prerequisite: WMT 118 and WMT 201 or equivalent with a grade of Credit or “C” of higher, or appropriate work experience
Corequisite: None.
Recommendation: None.
This course will introduce the student to the materials, methods, and tools used to make and manufacture a reproduction of an eighteenth-century Windsor chair. Topics include layout, turning, bending, and shaping the various chair components, final assembly, and finishing of the chair. Emphasis is placed on the safe use of tools and materials used in the chair construction. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 244
CHEST OF DRAWERS 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 102, WMT 103, and WMT 201 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This advanced course will reinforce skills learned in previous classes and challenge the student to demonstrate the ability to plan, design, fabricate and finish a chest of drawers. The course will allow the student more in-depth experience in solid-wood-panel side and frame-and-panel methods of construction. The focus will be on the carcass as well as on drawer construction. Topics include history, planning, design, fabrication and finishing as they pertain to building a chest of drawers. The course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 246
ROCKING CHAIR 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 102, WMT 103, WMT 132 and WMT 201 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: WMT 130.
This advanced furniture making course introduces the student to the methods, materials, tools and machinery used in the fabrication of a rocking chair. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 248
PRODUCTION FURNITURE MAKING AND MANUFACTURING 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: WMT 102 and WMT 103 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides students the opportunity to improve faceframe cabinetmaking skills.

WMT 249L
FURNITURE MANUFACTURING SPECIALTY 2.5 UNITS
Class hours: 8 lab
Prerequisite: WMT 101 and WMT 102 or WMT 103 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course allows students to perfect and hone skills acquired during previous furniture courses. In this lab, students will design and construct woodworking projects that are relevant to the subject matter being taught during the same time period. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 250
INTERMEDIATE FACEFRAME CABINETMAKING 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 151 and WMT 181 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
In this course the student will review and learn additional methods, materials, tools, and machinery used in the design, manufacturing, and installation of face frame cabinetry. Classroom topics include the history, design, milling, assembly, and installation of face frame cabinetry. Students will work in teams to design, fabricate and install a complete set of kitchen cabinets. A major emphasis will be on production techniques and the safe use of woodworking machinery and materials involved in cabinetmaking and millwork. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 251
ADVANCED FACEFRAME CABINETMAKING 4 UNITS
Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 250 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.
This course provides the student the opportunity to improve faceframe cabinetmaking skills.

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

321
by the use of tool and machinery specific to advanced faceframe cabinetmaking and millwork. Topics include inset door fabrication, coopered door construction, linen fold and other special panel detailing as well as applied moldings, appliqués and carvings. Students will fabricate a series of project samples for use in future advanced cabinetmaking projects. This course may be taken a maximum of 4 times.

**Transfer Credit: CSU**

**WMT 252**

**INTERMEDIATE 32MM SYSTEM CABINETMAKING**  **4 UNITS**

Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 153 and WMT 181 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: WMT 281.

In this course the student will review and learn additional methods, materials, tools, and machinery used in the design, manufacturing, and installation of European 32MM system cabinetry. Classroom topics include the history, design, milling, assembly, and installation of European 32MM system cabinetry. Students will work in teams to design, fabricate and install a complete set of European cabinets. A major emphasis will be on production techniques and the safe use of computerized numerical control panel processing machinery. This course may be taken a maximum of 4 times.

**Transfer Credit: CSU**

**WMT 253**

**ADVANCED 32MM SYSTEM OF CABINETMAKING**  **4 UNITS**

Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 252 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: None.
Recommendation: None.

This course provides the student the opportunity to improve European 32MM system cabinetmaking skills by the use of tools and machinery specific to advanced 32MM system cabinetmaking and millwork. Topics include advanced boring patterns, inset door installation, coopered and radius door applications, and other special trim and filler detailing as well as applied moldings, appliqués and carvings. Students will fabricate a series of project samples for use with future advanced 32MM system cabinetmaking projects. This course may be taken a maximum of 4 times.

**Transfer Credit: CSU**

**WMT 258**

**MANTLES AND WALL SYSTEMS**  **4 UNITS**

Class hours: 2.5 lecture/5.5 lab
Prerequisite: WMT 102, WMT 103, or WMT 155 or equivalent with grades of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

This course introduces the student to the methods, materials, tools, and machinery used in the design, manufacturing and installation of mantels and wall systems. Topics will include the history, design, milling, and assembly and installation of mantels and wall paneling. A major emphasis will be focused on the safe use of woodworking machinery and materials involved in architectural millwork. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**WMT 259L**

**SOLID SURFACE MANUFACTURING SPECIALTY LAB**  **2.5 UNITS**

Class hours: 8 lab
Prerequisite: WMT 159 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.

This course allows students to perfect and hone skills acquired during previous solid surface fabrication courses. In this lab, students will design and construct a project of their choice that is relevant to the subject matter being taught. This course may be taken a maximum of 4 times.

**Transfer Credit: CSU**

**WMT 268B**

**PRODUCTION CABINETMAKING AND MANUFACTURING (RESIDENTIAL)**  **5 UNITS**

Class hours: 4 lecture/4 lab
Prerequisite: WMT 151 or WMT 153 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: WMT 250 or WMT 252.
Recommendation: WMT 154, WMT 155, WMT 181.

This course specializes in the fabrication and installation of residential cabinetry and millwork. Topics include panel selection, wood choice, product adaptability and residential construction applications. Students will also receive instruction in production techniques, materials science, cost estimating, time management and scheduling. This course enables students to work as a team in the design, manufacturing, and installation of cabinets and fixtures for on-campus use. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**WMT 268C**

**PRODUCTION CABINETMAKING AND MANUFACTURING (MASS PRODUCTION)**  **5 UNITS**

Class hours: 4 lecture/4 lab
Prerequisite: WMT 151 or WMT 153 or equivalent with a grade of Credit or “C” or higher, or appropriate work experience.
Corequisite: WMT 250 or WMT 252.
Recommendation: WMT 154, WMT 155, WMT 181.

This course specializes in the fabrication and installation of mass production cabinetry, furniture products and millwork. Topics include material selection, product options, ergonomics, functionality and mass production construction applications. Students will also receive instruction in mass production systems, materials science, cost analysis, estimating, time management and building to industry standards. This course enables students to work as team in the design, manufacturing and installation of mass production cabinetry and fixtures for on-campus use. This class may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**WMT 269L**

**CABINETMAKING MANUFACTURING SPECIALTY**  **2.5 UNITS**

Class hours: 8 lab
Prerequisite: WMT 151 or WMT 153 or equivalent with a grade of Credit or “C” or higher.

This course allows students to perfect and hone skills acquired during previous
cabinetmaking courses. In this lab, students design and construct a cabinet project(s) that is relevant to the subject matter being taught during the same time period. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

WMT 281
ADVANCED COMPUTER OPERATIONS FOR CABINETMAKING AND DESIGN 2.5 UNITS
Class hours: 2 lecture/2 lab
Prerequisite: WMT 181 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This course provides the student with the advanced skills and knowledge required to better utilize cabinet manufacturing computer systems and software. Classroom topics will include cutting list development, panel optimizing, job/cost estimating, and introduction to catalog writing for software customization. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WORD PROCESSING
SEE BCOT
(Business Computerized Office Technologies)

ZOLOGY
(Science/Engineering/Math Division)

ZOO 120
INTRODUCTION TO ANIMAL BIOLOGY 4 UNITS
Class hours: 2 lecture/6 lab
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Credit or “C” or higher.
Corequisite: None.
Recommendation: None.
This is a survey course in animal biology. Included are a taxonomic review of major invertebrate and vertebrate groups, animal adaptations and behavior, basic anatomy and physiology (with emphasis on vertebrates), cell biology, reproduction and development, genetics, ecology, and evolution. Laboratory dissection is used to illustrate these principles. This is designed as an entry level course for both majors and non-majors in biology.
Transfer Credit: CSU; UC

NON CREDIT (ADULT EDUCATION) CLASSES

ENGLISH AS A SECOND LANGUAGE

AED 90.36 (NOT DEGREE APPLICABLE)
SUPERVISED INDIVIDUAL ESL TUTORIAL 0 UNIT
Class hours: 3 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: Enrollment in any Cerritos College course.
This course assists students in reinforcing, expanding, and improving the skills related to their specific English as a Second Language concerns. The course is taught using diagnostic-prescriptive methods, technology-mediated instruction, and individual and small group instruction. (Formerly ESL 36T)

READING

AED 90.41 (Not degree applicable)
SUPERVISED INDIVIDUALIZED READING 0 UNIT
Class hours: 3 lab, open entry/open exit
Prerequisite: None.
This course is for students who wish to improve their reading skills outside of a structured class. Students will be tested as they enter the class, or by the reading component of the Cerritos College assessment test. Based on the scores from the test, work in any of the following areas may be assigned: phonics, vocabulary study, vocabulary in context, literal comprehension, inferential comprehension, critical reading or study-related reading.
(Formerly READ 41T)

AED 90.7 (Not degree applicable)
SUPERVISED ASSISTANCE FOR TECHNOLOGY BASED COURSES 0 UNIT
Class hours: 3 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces student knowledge of educational technology resources on computers, improves student use of education technology for successful completion of technology-based course assignments, and empowers student confidence in utilizing educational technology. Special attention will be given to skills necessary for success in distance education courses. Formerly EDT 6T/EDT 7T/READ 5T)

LIBERAL ARTS

SPEECH

AED 90.32 (Not degree applicable)
COMMUNICATION DISORDERS 0 UNIT
Class hours: 3 lecture
Open entry/open exit
Prerequisite: None.
Limitation on enrollment: consultation by a certified speech pathologist. This course is for those students who have speech, hearing, language difficulties such as articulation problems, stuttering, voice disorders, regional or foreign dialects, and speech impairments due to hearing difficulties. This course provides individual or small group therapy. Students may enter the clinic at any time during the semester. (Formerly SPCH 32)

AED 90.46 (Not degree applicable)
INDIVIDUALIZED SPEECH 0 UNIT
Class hours: 3 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course explores topics in speech communications that are necessary for successful communication interactions to occur in college or community settings and, in the workplace. This course may not be taught every semester. (Formerly SPCH 46T)

SCIENCE/ENGINEERING/MATH

BIOLOGY & CHEMISTRY

AED 90.1 (Not degree applicable)
SUPERVISED SCIENCE TUTORIAL 0 UNIT
Class hours: 2 lab
Open entry/open exit
Corequisite: Enrollment in any chemistry course.
This course is designed to facilitate the learning of chemical knowledge, skills, and concepts through individualized and mediated instruction. It is open to any student enrolled in any chemistry course.
(Formerly BIOL 9T, CHEM 9T)

COMPUTER AND INFORMATION SCIENCE

AED 90.3 (Not degree applicable)
SUPERVISED COMPUTER UTILIZATION TUTORIAL 0 UNIT
Class hours: 2 hrs. arr.
Prerequisite: None.
Corequisite: Enrollment in any CIS courses.
Recommendation: None.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Students must attend two hours minimum per week and are limited to a maximum of six hours per week multiplied by the number of CIS courses in which the students are enrolled. (Formerly CIS 2L/CIS 3L)

**MATHEMATICS**

**AED 90.91 (Not degree applicable)**
**SUPERVISED MATHEMATICS - TUTORIAL 0 UNIT**
Class hours: 2 lab
Open entry/open exit
Corequisite: Enrollment in any Mathematics course.
This course is designed to facilitate the learning of mathematical knowledge, skills, and concepts through individualized and mediated instruction. It is open to any student enrolled in any mathematics course.
(Formerly MATH 9T)

**HEALTH OCCUPATIONS**

**NURSING**

**AED 90.47 (Not degree applicable)**
**SUPERVISED NURSING – TUTORIAL 0 UNIT**
Class hours: 9 lab
Open entry/open exit
Prerequisite: None.
Corequisite: Any nursing course or equivalent.
This course is designed to facilitate the learning of nursing knowledge, skills, and concepts through individualized and mediated instruction. It is open to students in the nursing program or planning to transfer into the program. This course is offered on a credit/no credit basis only. (Formerly NRSN 47T)

**TECHNOLOGY TRAINING & DISTANCE EDUCATION**

**EDUCATIONAL TECHNOLOGY**

**AED 90.7 (Not degree applicable)**
**SUPERVISED ASSISTANCE FOR TECHNOLOGY BASED COURSES 0 UNIT**
Class hours: 3 lab
Open entry/open exit
Prerequisite: None.
Corequisite: None.
Recommendation: None.
This course introduces student knowledge of educational technology resources on computers, improves student use of education technology for successful completion of technology-based course assignments, and empowers student confidence in utilizing educational technology. Special attention will be given to skills necessary for success in distanced education courses. (Formerly EDT 6T/EDT 7T/READ 5T)

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
The excellence of a college program is closely related to the excellence of the college faculty. The Cerritos College faculty represents a rich cross-section of scholarship, experience, and above all dedication to teaching. The faculty has helped earn a reputation for Cerritos as one of the finest community colleges in California.

The Faculty Senate of Cerritos College studies and recommends to the administration and Governing Board matters related to academic and professional standards and affairs of the college. The Senate consists of three officers and elected representatives from each of the college's instructional divisions.

**ABBRUZZESE, MARK (2005)**  
*Instructor*  
*Anthropology*  
B.A., California State University, Fullerton  
M.A., State University of New York, Binghamton

**ABING, JOSEPH (2003)**  
*Instructor*  
*Physical Education/Athletics*  
B.A., University of California, Los Angeles  
M.A., Azusa Pacific University

**ACKLAND, DEAN (1987)**  
*Professor*  
*Coordinator/Supervisor of Student Activities*  
B.S., California State University, Long Beach  
M.A., Azusa Pacific

**ALENIKOV, TERESA (2002)**  
*Assistant Professor*  
*Accounting/Finance*  
B.S., M.B.A., California State University, Long Beach  
M.A., Azusa Pacific

*Assistant Professor*  
*Educational Technology*  
B.A., California State University, Long Beach  
J.D., Western State University

*Assistant Professor*  
*English*  
B.A., Pomona College  
M.A., California Polytechnic State University, Pomona

**ANAYA, JOSE (2002)**  
*Director of Economic Development*  
B.S., California State Polytechnic University, Pomona  
M.B.A., University of Southern California

**ARAGON, RICHARD (1994)**  
*Associate Professor*  
*Automotive Mechanical Repair*  
B.A., California State University, Los Angeles

**ARCE, CARLOS (1991)**  
*Assistant Professor*  
*Spanish*  
B.A., California State University, Chico  
M.A., California State University, Sacramento

**ARFWEDSON, CHRISTINE (1997)**  
*Associate Professor*  
*Nursing Education*  
B.S., Nursing University of the State of New York  
M.N., University of Phoenix

**ASHE, SUZANNE (1986)**  
*Professor*  
*English*  
B.A., Rosary College, River Forest, IL  
M.A., University of California, Los Angeles

**ASIDDAO, VALENTIN (1992)**  
*Associate Professor*  
*English*  
B.A., Ateneo de Manila University  
M.A., California State University, Long Beach

**ASPEN, ROBERT (1979)**  
*Professor*  
*Auto Body*  
B.A., A.A., Cerritos College

**AUSTIN, ANTHONY (1980)**  
*Associate Professor*  
*Electronics*  
B.A., California State University, Los Angeles

**BALMAGES, MARY (1992)**  
*Professor*  
*Court Reporting*  
B.A., Fullerton Junior College  
A.B., University of California, Berkeley  
M.A., Chapman University

**BARCELÓ, MARVELINA (2004)**  
*Counselor/Instructor*  
*Counseling*  
M.S., University of LaVerne

**BARON, TONY (1986)**  
*Instructor*  
*Automotive Technology*  
B.A., A.S., Pierce College  
B.A., California State University, Los Angeles

**BARRATT, BONNIE R. (1998)**  
*Professor*  
*Graphic Design/Computer Graphics*  
B.A., Immaculate Heart College  
M.A., California State University, Los Angeles  
M.F.A., California State University, Fullerton

**BATHKE, JULIE (2002)**  
*Instructor*  
*Physical Therapist Assistant*  
B.S., California State University, Long Beach  
M.S., University of Kentucky

**BEALE, DARRYL K. (1973)**  
*Professor*  
*Psychology*  
Ph.D., University of Southern California

**BECK, ANGELA (2004)**  
*Instructor*  
*Child Development*  
B.A., California State University, Long Beach  
M.A., Pacific Oaks College

**BELBAS, MONICA (2000)**  
*Assistant Professor*  
*Anthropology*  
B.A., California State University, Northridge  
M.A., Ph.D., University of California, Riverside

**BELLO-GARDNER, SYLVIA (1987)**  
*Associate Professor*  
*Counselor*  
B.A., University of California, Los Angeles  
M.S., California State University, Long Beach

*Instructor*  
*Reading*  
B.A., M.S., California State University, Fullerton  
M.A., California State University, Long Beach

**BENDER, W. JON (1988)**  
*Instructor*  
*Automotive Technology*  
A.A., A.S., Los Angeles Pierce College  
B.A., California State University, Los Angeles

**BERKLITE, STEVEN L. (1985)**  
*Professor*  
*Automotive Technology*  
B.A., California State University, Long Beach  
M.A., Pepperdine University

**BERRY, PATRICIA A. (1978)**  
*Professor*  
*English as a Second Language*  
A.A., Santa Ana College  
B.A., M.A., California State University, Fullerton
BETANCOURT, DAVID (1999)
Assistant Professor/Director of Bands
Music
B.A., Berklee College of Music
M.M., N. Arizona University

BETTINO, M. L. (1991)
Administrative Dean, Innovation and Academic Support
B.A., M.A., California State University, Northridge

BLACKMUN, EUGENE (1983)
Professor
Business
A.A., Long Beach City College
B.S., Brigham Young University

BOARDMAN, CONSTANCE (1991)
Associate Professor
Biology
B.S., M.S., California State University, Long Beach

BRADY, MARY ELLEN (2004)
Instructor
Real Estate
A.A., Cerritos College

BRAUN, SHARON K. (1997)
Assistant Professor
Child Development
M.A., Pacific Oaks

BOWMAN, TAYLOR (1999)
Web Administrator
B.J., B.F.A., University of Texas
M.E.A., University of North Texas

BRADBURY, JEFFERY (1999)
Assistant Professor
Chemistry
B.S., Biola University
M.S., California Polytechnic State University, Pomona

BREIT, CRAIG A. (1985)
Assistant Professor
Theatre Arts
B.A., M.A., California State University, Long Beach

BRIDGES, GLORIA (1999)
Professor/Counselor
B.A., University of California, Los Angeles
M.A., California State University, Dominguez Hills

BUDARIN, DMITRI (2003)
Instructor
Mathematics
B.S., M.S., Moscow State University

BUENO, NI (2005)
Instructor
Fitness
B.S., University of South Florida
M.S., United States Sports Academy
EDD., Pepperdine University

BURNS, MARLA (1990)
Professor
English
A.A., Saddleback College
B.A., California State University, San Jose
M.A., California State University, San Francisco

BUSCHAUER, ROBERT (1989)
Professor
Physics
B.S., California Polytechnic University, Pomona
M.A., Ph.D., University of California, Irvine

BYUN, EUI WON JAMES (2004)
Assistant Professor
Math
B.A., California State University, San Bernardino
M.A., San Bernardino

CABUTO, FROYLAN (2000)
Professor
Spanish
B.A., M.A., California State University, Los Angeles

BODO JANOVICH, HOLLY (2004)
Director of Student Activities
B.A. Cal Poly San Luis Obispo
M.A., California State University, Los Angeles

Assistant Professor
Health, Physical Education/Athletics
B.A., M.A., Stanford University

CAINES, THOMAS R. (1997)
Instructor
Health, Physical Education/Athletics
B.A., California State University, Long Beach
M.Ed., Azusa Pacific University

CALLAHAN, PATRICK (1990)
Professor
Coordinator of Student Activities
B.A., California State University, Fresno
M.A., Azusa Pacific University

CAMPO, ROBERT B. (1997)
Instructor
Mathematics
B.A., M.A., California State University, Long Beach

CARNEY, DANIELLE (2000)
Assistant Professor
English
B.A., M.A., California State University, Long Beach

CARREON, LORA (2005)
Assistant Professor
Mathematics
B.S., M.A., California State University, Long Beach

CARROLL, DANI (2002)
Director
Dental Hygiene
A.A., Cerritos College
B.A., M.A., California State University, Long Beach

CASAS, RALPH P. (1995)
Associate Professor
Pharmacy Technology
A.A., Whittier College
M.A., Fuller Theological Seminary
M.A., Ph.D., Claremont School of Theology
Ph.D., University of Southern California

CHALMERS, GRAHAM (1991)
Professor
Chemistry
B.A., University of Waterloo
M.A., Ph.D., University of California, Berkeley

CHAMRAS, SEVADA (2002)
Instructor
Chemistry
B.S., University of California, Los Angeles
Ph.D., University of California, Santa Barbara

CHAVEZ, ERLINDA (1989)
Professor
Cosmetology
A.A., Cerritos College

CHESHER, ROBERT (1987)
Associate Professor
English
B.A., M.A., California State University, Northridge

CHOMUK, RENEE D. (2001)
Coordinator of CalWorks Services
A.A., Lincoln Land College
B.A., Oral Roberts University
M.A., Fuller Theological Seminary
M.S., California State University, Los Angeles
CLARKE, MARY (1980)
Professor
Mathematics
B.A., M.A., California State University, Long Beach

CLEMANS, SUSANNA (1986)
Professor
English
A.A., Orange Coast College
B.A., M.A., California State University, Fullerton

CLIFFORD, STEPHEN (2003)
Associate Professor
English
B.A., Assumption College
M.A., Marquette University
Ph.D., University of Washington

CODD, GERALDINE A. (1997)
Assistant Professor
Reading
B.A., Rider College
M.A., Seton Hall University

CONLEY, ANGELA (2004)
Assistant Professor
Math
B.A., M.A., California State University, Fullerton

CONNAL, JANICE S. (1988)
Counselor/Instructor
A.A., Fullerton College
B.A., Chapman College
M.A., California State University, Fullerton
Ph.D., University of California, Los Angeles

CONVEY, CYNTHIA (1996)
Manager of Employment Services/Faculty & Staff Diversity Officer
B.A., University of California, Irvine
J.D., University of California, Davis

COOKE, MELODIE (2004)
Instructor
Nursing
A.S., San Bernardino Valley College
B.S., B.S.N., M.S.N., University of California, Los Angeles

CORDOVA, ERNESTO (2002)
Instructor
Mathematics
B.S., University of California, Los Angeles
M.S., California State University, Long Beach

COULTER, LUCIA (1987)
Associate Professor
English as a Second Language
B.A., California State University, Fullerton
M.A., American University in Cairo, Egypt

COVILL, MATHEW (2005)
Instructor
Biological Sciences
B.S., M.S., California State University, Long Beach

CRAWFORD, SUZANNE (2004)
Assistant Professor
English
B.A., M.A., California Polytechnical University, Pomona

Cross, Kathleen (1990)
Assistant Professor/Counselor
B.S., California State University, Dominguez Hills
M.A., Loyola Marymount University

DE FRANCE, FRANCINE L. (1976)
Instructional Dean, Humanities & Social Sciences
Professor
B.A., M.Ed., Temple University
M.A., California State University, Long Beach

DEMICHELE, ANNA (2004)
Instructor
Music
M.A., Ph.D., Claremont Graduate University

Instructor
Mathematics/Engineering
B.S., Ain Shams University, Cairo, Egypt
M.S., California State University, Long Beach

DUFF, KIMBERLEY, (1999)
Assistant Professor
Psychology
B.A., University of California, Santa Barbara
M.A., Ph.D., University of Illinois, Chicago

DUVA, MARK (2004)
Assistant Professor
Psychology
B.A., California Polytechnical, Pomona
M.A., Ph.D., University of California, Riverside

DUNROE, WILLIAM D. (1979)
Professor
Psychology
B.A., M.A., California State University, Fullerton
Ph.D., Claremont Graduate School

Professor
Mathematics
B.A., California State University, Long Beach
M.S., University of LaVerne
M.A., California State University, Fullerton

EGAN, ISABELLE (1989)
Professor/Counselor
B.A., Marylhurst College
M.A., University of North Dakota
Ph.D., University of Oregon

ELIZONDO, SANDRA (2000)
Assistant Professor
Business Computerized Office Technologies
B.S., California State University, Los Angeles
J.D., Loyola Law School

ERNST, ROGER (2000)
Instructor
English
B.A., California State University, Long Beach
M.A., California State University, Dominguez Hills

FABISH, DAVID M. (1994)
Professor
English
B.A., California State University, Long Beach
M.F.A., University of Iowa

FAILOR, JOLEEN (1976)
Professor
Dental Assisting
A.A., Fullerton Junior College
B.V.E., California State University, Long Beach

FALCON, DENNIS P. (1997)
Assistant Professor
Political Science
B.A., California State University, Long Beach
M.A., Southern Illinois University

FARINA, MICHAEL J. (1989)
Professor
Accounting
A.A., Cerritos College
B.A., California State University, Fullerton
M.B.A., University of California, Irvine

FARMER JR, WILLIAM (2005)
Vice President of Academic Affairs/Assistant Superintendent
B.A., Georgetown College, Kentucky
M.A., Bradley University, Illinois

FELDSTEIN, THERESE (1988)
Professor
Mathematics
B.S., M.S., Northern Illinois University

FERNANDEZ, CHRISTINA (2001)
Instructor
Photography
B.A., University of California, Los Angeles
M.F.A., California Institute of Arts
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Department</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fernández, Walter I.</td>
<td>Associate Professor</td>
<td>History</td>
<td>B.A., M.A., California State University, Northridge</td>
</tr>
<tr>
<td>Finkelstein, Hy L.</td>
<td>Professor</td>
<td>Management</td>
<td>B.A., M.B.A., California State University, Long Beach</td>
</tr>
<tr>
<td>Flores-Church, Adriana</td>
<td>Assistant Director of Human Resources</td>
<td></td>
<td>B.S., Universidad Tecnología de México</td>
</tr>
<tr>
<td>Florescu, Mihaela</td>
<td>Professor</td>
<td></td>
<td>M.A., University of Phoenix</td>
</tr>
<tr>
<td>Fobi, Charlene</td>
<td>Professor</td>
<td>Nursing Education</td>
<td>A.D.N., B.S.N., University of Cincinnati</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.N., University of California, Los Angeles</td>
<td>Ed.D., Pepperdine University</td>
</tr>
<tr>
<td>Follett, Kay S.</td>
<td>Professor</td>
<td>Disabled Student Programs &amp; Services</td>
<td>B.S., University of Southern California</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., California State University, Los Angeles</td>
<td>Ph.D., University of Southern California</td>
</tr>
<tr>
<td>Fortner, Anthony</td>
<td>Instructor</td>
<td>Woodworking Manufacturing Technologies</td>
<td>B.A., California State University, Long Beach</td>
</tr>
<tr>
<td>Franklin, Laura</td>
<td>Director of Community Education</td>
<td></td>
<td>B.S., University of Arizona</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., University of California, Los Angeles</td>
<td></td>
</tr>
<tr>
<td>Fronke, Mark J.</td>
<td>Professor</td>
<td></td>
<td>B.S., University of Southern California</td>
</tr>
<tr>
<td>Fuschetto, Susan</td>
<td>Assistant Professor</td>
<td>Computer and Information Sciences</td>
<td>B.A., National University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.B.A., Pepperdine University</td>
<td></td>
</tr>
<tr>
<td>Gaffaney, Todd W.</td>
<td>Instructor</td>
<td>Psychology</td>
<td>B.A., M.A., California State University, Northridge</td>
</tr>
<tr>
<td>Gales, Charles E.</td>
<td>Coordinator of Student Health Services</td>
<td></td>
<td>A.A., Cerritos College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., M.S., California State University, Long Beach</td>
<td></td>
</tr>
<tr>
<td>Gai, Frank</td>
<td>Professor</td>
<td>English</td>
<td>B.S., McNeese State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.F.A., University of Arkansas</td>
<td>Ph.D., University of Southern California</td>
</tr>
<tr>
<td>George, Patty</td>
<td>Professor</td>
<td>Mathematics</td>
<td>B.A., M.A., M.S., University of California, Riverside</td>
</tr>
<tr>
<td>Gersitz, Lorraine</td>
<td>Librarian/Instructor</td>
<td></td>
<td>B.A., M.L.S., Rutgers University</td>
</tr>
<tr>
<td>Gleichner, Carrie E.</td>
<td>Assistant Professor</td>
<td>Health, Fitness/Wellness</td>
<td>B.A., New York University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., Ph.D., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>Gonzales, Joana</td>
<td>Assistant Professor</td>
<td>English</td>
<td>B.A., M.A., University of California, Irvine</td>
</tr>
<tr>
<td>Gradin, Susan</td>
<td>Instructor</td>
<td>Child Development</td>
<td>B.A., University of California, Santa Barbara</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S., Pepperdine University</td>
<td></td>
</tr>
<tr>
<td>Grosfeld, Stephen</td>
<td>Instructor</td>
<td>Athletics</td>
<td>A.A., Cerritos College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.S., Utah State</td>
<td>M.S., Azusa Pacific University</td>
</tr>
<tr>
<td>Guest-Giffith, Alison J.</td>
<td>Instructor</td>
<td>Art</td>
<td>B.A., University of Leicester, England</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., Ohio State University</td>
<td></td>
</tr>
<tr>
<td>Guy, Georgina</td>
<td>Instructor/EOPS Fin Aid Counselor</td>
<td></td>
<td>B.A., M.S., California State University, Dominguez Hills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S., California State University, Fullerton</td>
<td>Ph.D., Alliant International University</td>
</tr>
<tr>
<td>Haas, John H.</td>
<td>Instructor</td>
<td>History</td>
<td>B.A., California State University, Los Angeles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ph.D., Claremont Graduate School</td>
<td></td>
</tr>
<tr>
<td>Hallinger, Donald</td>
<td>Assistant Professor</td>
<td>Earth Science</td>
<td>B.S., Virginia Poly Tech Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., Indiana University</td>
<td></td>
</tr>
<tr>
<td>Hampton, Preston</td>
<td>Professor/Counselor</td>
<td></td>
<td>B.A., University of California, Berkeley</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.A., Azusa Pacific University</td>
<td>Ed.D., University of Southern California</td>
</tr>
<tr>
<td>Hanks, Wendell G.</td>
<td>Professor</td>
<td>Electronics</td>
<td>B.A., California State University, Los Angeles</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Habbut, Chester</td>
<td>Professor</td>
<td>Biology</td>
<td>B.A., St. Ambrose College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M.S., University of California, Los Angeles</td>
<td>Ph.D., Tulane University</td>
</tr>
<tr>
<td>Havice, Sally</td>
<td>Associate Professor</td>
<td>English</td>
<td>A.A., Cerritos College</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B.A., M.A., California State University, Long Beach</td>
</tr>
<tr>
<td>Haynes, W. Douglas</td>
<td>Professor</td>
<td>Administration of Justice</td>
<td>A.A., Golden West College</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B.S., M.S., California State University, Long Beach</td>
</tr>
</tbody>
</table>
HECKERMAN, EDWARD (2004)  
Assistant Professor  
Photography  
B.A., Sonoma State University  
M.F.A., California Institute of Arts

HELBERG, BONNIE (1988)  
Assistant Professor  
Reading  
B.A., M.A., California State University, Long Beach

HENRIQUES, JAMES (1988)  
Professor  
Physics  
B.S., M.S., Georgia State University

HENRY, FRED (1986)  
Assistant Professor  
Welding  
Community College Ltd Service Credential, UCLA

HIGDON, JOANN (2005)  
Directory of Purchasing  
B.A., California State University, Fullerton

HIRANANDANI, JAYANANDA (1992)  
Professor  
Engineering Design Technology  
B. Tech., M. Tech., Indian Inst. of Tech., Kharagpur, W. Bengal, India  
M.S., University of California, Berkeley

HIROHAMA, STEVEN  
Assistant Professor  
Theatre Arts  
B.A., B.F.A., University of Hawaii, Manoa  
M.F.A., University of California, Los Angeles

HO, JENNEY (2003)  
Directory of Purchasing  
B.A., California State University, Fullerton

HOGGARD, KEVIN (1985)  
Professor  
Theatre Arts  
B.A., B.F.A., University of California, Riverside

HOHLY, MARGARET (1984)  
Professor  
Computer and Information Sciences  
B.S., M.S., California State University, Long Beach  
M.S., California State University, Fullerton

HOLMES, CAROLYN R. (1996)  
Associate Professor  
Nursing Education  
B.S., M.S., California State University, Dominguez Hills

HOLMES, JUDI (2001)  
Assistant Professor  
Disabled Student Programs and Services  
B.A., M.S., California State University, Long Beach

HOLZGANG, AMY (2001)  
Instructor  
Sociology  
B.A., University of California, San Diego  
M.A., Ph.D., Syracuse University

Associate Professor  
Speech Communication  
B.A., M.A., California State University, Fullerton

HORVATH, ELLEN (1989)  
Professor  
Speech Pathology  
B.A., Loyola Marymount  
M.A., California State University, Long Beach

HOYLE, SHEELA (2000)  
Instructor/Counselor  
B.A., University of California, Berkeley  
M.A., California State University, San Diego

HU, PHILIP (2002)  
Professor  
English  
B.A., University of California, San Diego  
M.F.A., California State University, San Diego

HUBERT, KIMBERLY (1999)  
Assistant Professor  
Speech Communication  
B.A., M.A., California State University, Fullerton

HUBER, ROBERT C. (1988)  
Professor  
Theatre Arts  
B.A., California State University, Los Angeles  
M.A., Humboldt State University  
Ph.D., University of Southern California

Assistant Professor  
Mathematics  
A.B. Secondary, Dordt College  
M.A., California State University, Fullerton

HUGHES, CAROL (2005)  
Instructor  
Nursing  
A.S., Long Beach City College  
B.S., California State University, Fullerton  
M.S., California State University, Long Beach

HUNT, MARY (2004)  
Central Intake and Service Specialist/Instructor  
DSPS  
B.F.A., Otis Art Institute  
M.A., Philips Graduate Institute

JAIME, JENNIE (2000)  
Assistant Professor  
Spanish  
B.A., M.A., California State University, Los Angeles

JANOSOVA, ANITA M. (1992)  
Associate Professor  
Art and Design  
B.F.A., M.F.A., School of Art Institute, Chicago

JARRETT, GEORGE (2004)  
Instructor  
History  
B.A., University of California, Santa Cruz  
M.A., University of California, Davis

Associate Professor  
Health, Physical Education/Athletics  
B.S., California State University, Fullerton  
M.S., Louisiana Tech University

JOHNSON JR, ADOLPH (1982)  
Dean of Academic Affairs  
B.A., University of California, Santa Barbara  
M.A., M.P.A., Ph.D., University of Southern California

JOHNSON, BRUCE A. (1977)  
Professor  
Welding  
A.S., Long Beach City College  
B.V.E., California State University, Long Beach

JOHNSON, JEANNE EVA (1973)  
Professor  
Cosmetology  
B.V.E., California State University, Long Beach

JOHNSON, STEPHEN B (2005)  
Vice President of Student Services/Assistant Superintendent  
B.A., University of California, Berkeley  
M.A., San Diego State University  
Ed.D., University of California, Los Angeles

JOHNSON, WAYNE (1989)  
Professor  
Biology  
A.A., El Camino College  
B.S., M.A., California State University, Long Beach
JONES, MICHAEL (2004)
Instructor
Woodworking
B.A., University of California, Irvine

JONES, SHAWN (2005)
Accounting Manager
B.S., California State University, Haywood

JORDAN, WESLEY (1991)
Associate Professor
Mathematics
B.S., M.S., California State University, Long Beach

JUNTILLA, TIMOTHY J. (1997)
Assistant Professor
English
B.A., California Lutheran University
M.S., Illinois State University

KASTAN, CYNTHIA (1979)
Professor
Art and Design
Diplome Normal, Sorbonne, University of Paris
B.A., University of California, Berkeley
B.F.A., M.F.A., Otis Art Institute, Los Angeles

KEENAN, DIANE (1989)
Professor
Economics
B.A., California State University, Long Beach
M.A., University of California, Los Angeles

KETCHAM, JULE (1999)
Instructor/Librarian
B.A., Chapman University
M.L.I.S., University of California, Los Angeles

Professor
Accounting
A.A., Fullerton College
B.A., M.B.A., California State University, Fullerton

KNOWLTON, MARY (2004)
Instructor
Nursing
B.S.N., Marquette University
M.S.N., Duke University

KRAYER, ADELLE (2001)
Instructor
Dental Hygiene
A.A., Cerritos College
B.E., M.A., California State University, Long Beach

KREGER, ROBERT (1991)
Professor
Earth Science
A.A., Des Moines Area Community College
B.A., Eastern Illinois University
M.A., Ph.D., University of Illinois

KREMER, NICK (2000)
Executive Dean of Community, Industry and Technology Education
B.A., Stanford University
M.A., Claremont Graduate University

KRICHMAR, LEE (1999)
Director of Computer Services
B.S., DeVry Institute of Technology
M.I.S., Claremont Graduate School

KURTZ, DANITA J. (1999)
Coordinator of International Student Services
B.S., Ohio State University
M.Ed., Florida Atlantic University

LACY, TOR (2005)
Instructor
Earth Science
B.S., University of California, Santa Barbara
M.S., California State University, Long Beach

LAVARIERE, CYNTHIA (2000)
Instructor
Co-Director of Forensics/Speech Communication
B.A., Point Loma Nazarene College
M.A., California State University, Fullerton

Professor
Electronics
A.A., Cerritos College
B.S., University of the State of New York

LEON, RUBEN JR. (1990)
Assistant Professor
Mathematics
B.A., M.A., California State University, Long Beach

LEWANDOWSKI, THOMAS (2002)
Instructor
Mathematics
B.S., University of Wisconsin
M.S., California State University, Long Beach

LEWELLEN, RITA (2002)
Assistant Professor
Psychology
B.A., M.A., California State University, San Marcos

LIVINGSTON, ROBERT (2001)
Assistant Professor
Business Administration
B.S., M.A., University of San Francisco

LOPEZ DE GAINES, CHRISTINA (1976)
Professor/Counselor
B.A., California State University, Long Beach
M.S., California State University, Fullerton

LOPEZ, CHRISTINE S. (1992)
Associate Professor
Piano/Choral
B.M., M.M., D.M.A., University of Arizona

LOPEZ, MANUEL (2001)
Instructor
Mathematics
B.S., M.A., University of California, Los Angeles
M.A., California State University, Fullerton

LOPEZ, MONICA (2004)
Librarian/Instructor
Library
B.A., California State University, Fullerton
M.L.S., San Jose State University

LOPEZ, THERESA (2000)
Dean of Career and Assessment Services
B.S., California State Polytechnic University, Pomona
M.S., California State University, Los Angeles

LOU, ZHENG (2000)
Professor
Computer and Information Sciences
B.E., University of Shanghai for Sciences & Technology
M.S., University of Massachusetts, Amherst

LO VETERE, CRYSTAL (2004)
Assistant Professor
Earth Science
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

LUNDEEN, BRITTANY
Counselor
Counseling
B.A., California State University, Fullerton
M.S., California State University, Long Beach
MACIAS, DORA (2001)
Assistant Professor/Counselor
International Students Program
B.A., California State University, Fullerton
M.A., California State University, Dominguez Hills

MACIAS, SERGIO (2005)
Instructor
Athletics
B.A., Whittier College
M.A., California State University, Los Angeles

MALKIN, HAROLD (2003)
Instructor
Pharmacy Technology
B.S., University of California, Los Angeles

MARIANI, ILIYA (2000)
Assistant Professor
Mathematics
B.S., University of Zagreb, Croatia
M.S., California State University, Long Beach

MARINE, REBECCA A. (1994)
Professor
Child Development
B.A., Tufts University
M.A., California State University, Los Angeles

Associate Professor
Medical Assistant
B.S.N., Alverno College
M.S., California State University, Long Beach

MATA, PILAR (2000)
Assistant Professor
Mathematics
B.A., M.A., California State University, Fullerton

MARTINO, DANIELLE (2005)
Instructor
Physics/Astronomy
B.S., California State University, Fullerton
M.S., San Diego State University

MATSUURA, KENNETH (1990)
Professor/Counselor
B.A., University of California, Santa Barbara
M.A., Ph.D., University of California, Los Angeles

MAYFIELD, CONNIE (2005)
Instructional Dean, Fine Arts/Communications
B.A., Southwest Baptist University, Missouri
M.M., University of Missouri, Kansas City
Ph.D., University of Kansas, Kansas

MAZZOTA, FRANK (1976)
Professor
Physical Education/Athletics
B.A., University of Utah
M.A., Pepperdine University

MacDEVITT, JAMES (2005)
Instructor
Art
B.A., M.A., University of California, Riverside

McFADDEN, WILLIAM (1982)
Professor
Mathematics/Computer Science
B.A., University of California, Los Angeles
B.S., University of California, Irvine
M.A., California State University, Long Beach

McGINNIS, JOHN (1988)
Dean of the Library and Learning Resource Center
Associate Professor
B.A., M.A., Loyola University
M.L.S., University of Southern California

McLARTY-SCHROEDER, JANET (1999)
Assistant Professor
Astronomy
B.S., University of Iowa
M.S., University of Arizona

McPHerson, MICHAEL (1988)
Associate Professor
Health and Physical Education
B.A., California State University, Northridge
M.A., Azusa Pacific University

McQUARRIE, MEGAN (2002)
Instructor
Earth Science
B.A., University of Rhode Island
M.S., Duke University

MEDINA, CECILIA (1976)
Professor
Child Development/Early Childhood
B.A., Notre Dame College
M.A., California State University, Los Angeles

MEDINA-VALIN, NIURKA (1989)
Professor
Spanish
B.A., M.A., California State University, Los Angeles
Ph.D., University of Southern California

MELLAS, DEAN (2000)
Instructor
Computer and Information Science
B.A., B.S., California State University, Fullerton

MENDEZ, MARIA (2000)
People-Soft Database Administrator
B.A. California State University, Long Beach

MILLER, ALICE (1985)
Instructor
Reading
B.A., Southern Illinois University
M.A., Arizona State University

MILLER, DONNA (1972)
Associate Professor
Speech Communication
B.A., California State University, Northridge
M.A., University of Southern California

MILLER, KIRK (1988)
Professor
Art and Design
A.B., University of California, Berkeley
B.F.A., M.F.A., Art Center College of Design

MITCHELL, VALENCIA (1989)
Professor
Librarian
B.A., Mills College
M.S., University of Southern California
M.A., California State University, Long Beach

MIXSON JR., FRANK L. (1998)
Associate Professor
English
B.A., Drake University
M.A., California State University, Long Beach
Ph.D., University of Georgia

MOLONEY, PETER (2002)
Assistant Professor
Accounting/Finance
B.S., M.B.A., California State Polytechnic University, Pomona

MOORE, DEBRA (2001)
Associate Professor
Librarian
B.A., Oberlin College
M.A., Andover Newton Theological School
M.L.S., University of California, Los Angeles

MORGAN, VYKKI (1992)
Professor
Court Reporting
A.A., Chaffey College
B.A., National University
M.A., Pepperdine University
MORIARTY, CYNTHIA (1992)
Professor
Business Computerized Office Technologies
A.A., Fullerton Junior College
B.S., California State University, Fullerton
M.B.A., University of La Verne

MOTRUK, NINA (2001)
Assistant Professor
Cosmetology
A.A., Cerritos College
B.S., Southern Illinois University

MUELLER, BARBARA J. (1995)
Associate Professor
English
B.A., Kansas State University
M.A., California State University, Long Beach

MULLIN, MARY (2005)
Instructor
Paralegal Education
J.D., Western State University

MURGUIA, STEPHANIE (2001)
Dean of Admissions, Records and Services
A.A., Palomar College
B.A., California State University, San Marcos
M.A., University of San Diego

MURRAY, KODEE (2001)
Assistant Professor
Physical Education/Athletics
B.S., California Polytechnic State University,
Pomona
M.A., California State University, Dominguez Hills
M.S., National University

NAJARIAN, HAGOP (1999)
Instructor
Art and Design
B.A., California State University, Long Beach
M.A., Temple University

NAKAMURA, DIANE (1986)
Assistant Professor
English as a Second Language
B.A., Marymount Manhattan College, New York
M.A., Columbia University

NAKASONE, HARRIET H. (1973)
Professor
Disabled Student Programs and Services
B.A., M.S., California State University, Long Beach

NAMALA, SOLOMON (1999)
Associate Professor
Economics
B.A., Lewis & Clark College
Ph.D., University of Utah

NANCE, WESLEY (1979)
Professor
Computer and Information Sciences
B.A., M.A., California State University, Long Beach
M.A., University of California, Santa Barbara

NATIVIDAD, RACHEL (2002)
Instructor
Nursing Education
A.S., Mt. San Antonio College
B.S., California State University, Fullerton
M.S., University of Phoenix

NEGrete, BERNARD J. (1981)
Professor
Computer and Information Sciences
B.A., California State University, Long Beach
M.S., National University

NELSON, DAVID W. (1986)
Professor
Music
B.A., M.A., Ph.D., University of California, Santa Barbara

NGUYEN, PAMELA (2000)
Instructor
Mathematics
B.S., M.S., California State University, Long Beach

NGUYEN, PHUONG D. (1991)
Professor
Computer and Information Sciences
B.S., M.S., University of California, Davis

NIKDEL, MOJDEH (1997)
Instructor
Mathematics
B.A., M.S., Ph.D., Pennsylvania State University

NINOMIYA, KATHLYN (1986)
Professor
Dental Hygiene
A.A., Cerritos College
B.S., California State University, Long Beach

NOLAN, JENINE (1980)
Instructional Dean, Health Occupations
B.A., Whittier College
B.S.N., University of California, San Francisco
M.N., University of California, Los Angeles

NOVINSKI, PATRICIA (2001)
Assistant Professor
Cosmetology
B.E., California State University, Long Beach

O'BRIEN, SCOT (2000)
Instructor
Disabled Students Program and Services
M.A., California School of Professional Psych

OWENS, DEBORAH (2003)
Director of Child Development Center
B.S., M.S., University of California Davis
M.A., Ph.D., The Fielding Institute

OCHI, BRYAN (2005)
Instructor
Welding
A.S., Long Beach City College

PAGE, ELIZABETH (1999)
Assistant Professor/Counselor (DSPS)
B.A., California State University, Dominguez Hills
M.A., California Polytechnic State University, San Luis Obispo

PAIGE, MATTHEW (1998)
Instructor
Reading
B.A., California Lutheran College
M.A., California State University, Long Beach

PALUMBO, LINDA (1988)
Professor
English
B.A., Rutgers University
M.A., Ph.D., University of Southern California
PARSONS, SUSAN (1985)
Associate Professor
Mathematics
B.A., M.A., California State University, Long Beach

PATRICK, CAROL (1997)
Dean of Counseling Services
B.A., University of Michigan
M.A., M.S., San Diego State University

PAYNE, RAMONA (1999)
Budget Manager
B.S., California State University, Los Angeles

PEEBLES, RANDY (1985)
Instructional Dean, Technology
B.A., M.A., California State University, Long Beach
Ed.D., Pepperdine University

PERALTA, TRUDY A. (1990)
Professor
English
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

PIERINI, MICHAEL S. (1995)
Associate Professor
Culinary Arts/Baking
A.A., West Los Angeles College
B.V.E., California State University, Long Beach

PIORKOWSKI, MARIJEAN (1977)
Professor
Physical Therapist Assistant Program
A.A., Orange Coast College
B.S., M.S., University of California, Los Angeles
D.P.T., Western University

O’ROURKE, DANIEL M. (1974)
Acting Director of Human Resources
A.A., Cerritos College

PIRTLE, DIANNE D. (1997)
Assistant Professor
Sociology
B.A., University of California, Los Angeles

PORTIGAL, STEVEN J. (1991)
Professor
Art and Design
B.A., San Fernando Valley State
M.F.A., University of California, Los Angeles

POTTER, INGEBORG (1979)
Professor
German
B.A., M.A., California State University, Fullerton

PRIBBLE, MARY (1984)
Professor
Paralegal
A.A., Citrus College
B.A., Whittier College
M.B.A., California State University, San Bernardino
J.D., Western State University

PRICE, TERRY L. (1975)
Professor
Plastics Technology
A.A., East Los Angeles College
B.A., California State University, Long Beach

PRINDLE, JEANINE V. (1977)
Associate Professor
Music
B.A., Chapman University
M.A., Claremont Graduate School

QUAAS-BERRYMAN, FRANCIE (1999)
Assistant Professor
English
A.A., Santa Ana College
B.A., M.A., California State University, Fullerton

REAL, YANNICK (2000)
Assistant Professor
Machine Tool Technology
B.S., University of Metz
M.S., California State University, Long Beach
Engr., University of Southern California

REECE, BRYAN S. (1991)
Associate Professor
Political Science
B.A., M.A., University of Southern California

RENTERIA, ROBERT A. (1975)
Professor
Reading
A.A., East Los Angeles College
B.A., M.A., California State University, Los Angeles
M.S., California State University, Fullerton

RICHARDSON, STEVEN (2000)
Executive Director of Foundation
B.A., Biola University

RICHEY, THOMAS (2003)
Instructor
Operations Manager
A.A., Cypress College

RIEDEL, PATRICIA (2003)
Instructor
Nursing
B.S., California State University, Los Angeles
M.S., California State University, Long Beach

RIFFLE, ROBERT (2003)
Director of Physical Plant
A.A., Fullerton College

RIGBY, JEFFREY (1991)
Professor
Anthropology
B.A., M.A., University of California, Los Angeles

RIZKALLAH, BERLANTI (1981)
Director of Fiscal Services
B.S., University of Cairo, Egypt
M.B.A., National University

ROBBINS, PATRICIA (2002)
Director of Foster & Kinship Care Education Programs
B.A., University of California, Los Angeles
M.S., California State University, Fullerton

ROBERTS, LYNDA (1989)
Professor
Childhood Development
A.A., Long Beach Community College
B.A., M.A., California State University, Long Beach

ROBLES, MARTA (2004)
Instructor
Adult Ed/Diversity Program
B.S., California State University, Chico

ROBERTSON, CHARLES C. (1994)
Professor
Automotive Collision Repair
A.A., Cerritos College
A.S., Long Beach City College
B.V.E., California State University, Long Beach

RODRIGUEZ, PHILIP C. (1974)
Professor
Dean of Student Support Services
A.A., Cerritos College
B.A., California State University, Fullerton
M.A., California State University, Dominguez Hills
Ed.D., University of Southern California

ROMAN, HENRIETTA (2001)
Instructor/EOPs Counselor
B.A., California State University, San Diego
M.A., University of Redlands
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution 1</th>
<th>Institution 2</th>
<th>Institution 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROMER, CHRISTINE (1981)</td>
<td>Associate Professor</td>
<td>Chemistry</td>
<td>B.A., M.A., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>ROMERO, VIRGINIA (1980)</td>
<td>Professor/Athletics Counselor</td>
<td>B.A., California State University, Long Beach M.A., Azusa Pacific University M.S., California Lutheran College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROSE, LINDA D. (1994)</td>
<td>Professor</td>
<td>Interim Instructional Dean, Liberal Arts</td>
<td>A.A., West Los Angeles College B.A., M.A., California State University, Dominguez Hills</td>
<td></td>
</tr>
<tr>
<td>ROTHER, EDWARD (1989)</td>
<td>Professor</td>
<td>Architecture</td>
<td>B.S., M.Arch., University of Illinois M.B.A., California State University, Fullerton Ed.D., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>RYOZAKI, EVELYN (1990)</td>
<td>Professor/Counselor (EOPS)</td>
<td>B.A., University of California, Los Angeles M.A., California State University, Dominguez Hills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAJJADHAM, DARA (2004)</td>
<td>Assistant Professor</td>
<td>Mathematics</td>
<td>B.S., M.S., California State University, Long Beach</td>
<td></td>
</tr>
<tr>
<td>SALAZAR, MICHAEL (1998)</td>
<td>People-Soft Database Administrator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SALAZAR, PHILLIP (1981)</td>
<td>Professor</td>
<td>Counselor</td>
<td>B.A., California State University, Los Angeles M.A., California State University, Long Beach M.A., Whittier College</td>
<td></td>
</tr>
<tr>
<td>SAMPSON, LYNDA (1989)</td>
<td>Professor</td>
<td>Librarian</td>
<td>B.A., Scripps College M.L.S., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>SANDERSON, JANET (1986)</td>
<td>Professor</td>
<td>Physical Education/Dance</td>
<td>B.A., M.A., California State University, Los Angeles</td>
<td></td>
</tr>
<tr>
<td>SARELL, GARY (1985)</td>
<td>Professor</td>
<td>Mathematics</td>
<td>B.A., California State University, Fullerton M.A., California State University, Long Beach</td>
<td></td>
</tr>
<tr>
<td>SATTERFIELD, PHILLIP (2000)</td>
<td>Assistant Professor</td>
<td>Administration of Justice</td>
<td>A.A., Long Beach City College B.S., M.P.A., California State University, Long Beach</td>
<td></td>
</tr>
<tr>
<td>SCHMIDT, DEBRA L. (1990)</td>
<td>Professor</td>
<td>Accounting</td>
<td>B.A., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>SCRANTON, BRENDAN (2003)</td>
<td>Counselor</td>
<td></td>
<td>B.A., Loyola Marymount M.A., California State University, San Jose</td>
<td></td>
</tr>
<tr>
<td>SERWIN, LYNN A. (1997)</td>
<td>Associate Professor</td>
<td>English</td>
<td>B.A., California State University, Fullerton M.A., California State Polytechnic University, Pomona</td>
<td></td>
</tr>
<tr>
<td>SESTINI, SALLY (1986)</td>
<td>Professor</td>
<td>Mathematics</td>
<td>B.A., University of California, Los Angeles M.S., California State University, Northridge</td>
<td></td>
</tr>
<tr>
<td>SHAH-WILLIAMS, NISHI (2004)</td>
<td>Assistant Professor</td>
<td>English</td>
<td>B.A., M.A., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>SHARP, MAGEYA (1983)</td>
<td>Professor</td>
<td>Business Communication/Business Computerized Office Technologies</td>
<td>B.A., California State University, Long Beach M.S., Pepperdine University</td>
<td></td>
</tr>
<tr>
<td>SHELTON, CAROLINE (2001)</td>
<td>Director of Research &amp; Planning</td>
<td></td>
<td>B.A., M.A., California State University, Fullerton</td>
<td></td>
</tr>
<tr>
<td>SHIMAZU, CHERYL (1989)</td>
<td>Associate Professor</td>
<td>Chemistry</td>
<td>B.A., University of California, Irvine M.S., California State University, Long Beach</td>
<td></td>
</tr>
<tr>
<td>SMITH, DANIEL (2002)</td>
<td>Instructional Dean, Physical Education/Athletics, Professor</td>
<td>B.S., M.S., Brigham Young University Ph.D., University of Illinois</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMITH, FELICIA (2004)</td>
<td>Instructor</td>
<td>Cosmetology</td>
<td>A.S., El Camino Community College B.S., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>SMITH, JEFFERY L. (1979)</td>
<td>Instructor</td>
<td>Physical Education/Athletics</td>
<td>B.S., Michigan State University M.A., Azusa Pacific University</td>
<td></td>
</tr>
<tr>
<td>SMITH, RONALD L. (1992)</td>
<td>Instructor</td>
<td>Manufacturing Technology</td>
<td>B.S., California State University, Fresno</td>
<td></td>
</tr>
<tr>
<td>SOKOLOWSKI, BARBARA A. READ (1987)</td>
<td>Professor</td>
<td>Business Communication/Business Computerized Office Technologies</td>
<td>B.S., College Misericordia, Dallas, PA M.S., Marywood College</td>
<td></td>
</tr>
<tr>
<td>SPARKS JR., WILLIAM F. (1995)</td>
<td>Associate Professor</td>
<td>Co-Director of Forensics/Speech Communication</td>
<td>B.A., M.A., University of Southern California</td>
<td></td>
</tr>
<tr>
<td>SPENCE, ROSLYN (2005)</td>
<td>Instructor</td>
<td>Culinary Arts</td>
<td>B.A., California State University, Long Beach</td>
<td></td>
</tr>
<tr>
<td>STAMMERJOHN, CARL (2004)</td>
<td>Instructor</td>
<td>Woodworking</td>
<td>B.S., California Polytechnical, San Luis Obispo</td>
<td></td>
</tr>
<tr>
<td>STAPP, LESLIE E. (1999)</td>
<td>Assistant Professor</td>
<td>Philosophy</td>
<td>M.A., Ph.D., University of California, Davis</td>
<td></td>
</tr>
</tbody>
</table>
STEIN, GERALD (1992)
Professor
Paralegal
B.A., California State University, Long Beach
J.D., Southwestern University School of Law

STEWART, PATRICIA J. (1972)
Professor
Dental Hygiene
A.A., Cerritos College
B.S., University of Southern California
M.A., California State University, Long Beach
Ph.D., University of Southern California

STILES, LYNN M. (1990)
Professor
English
B.A., M.A., California State University, Long Beach

STUART, PEGGY J. (1995)
Associate Professor
Nursing Education
B.S.N. California State University, Long Beach
M.S.N., California State University, Los Angeles

SUGIHARA-CHEETHAM, JOANN (2002)
Instructor
English as a Second Language
B.A., University of California, Riverside
M.A., California State University, San Francisco

SUGIYAMA, CHRISTINE (1987)
Professor/Counselor
B.A., University of California, Los Angeles
M.A., California State University, Dominguez Hills

SWANSON, JOHN (1992)
Professor
English
A.B., University of California, Berkeley
M.E.A., University of California, Irvine

Associate Professor
Welding
A.A., Cerritos College
B.V.E., California State University, Long Beach

TAYLOR, KEVIN (1992)
Professor
Automotive Technology
B.A., M.A., California State University, Long Beach

TORRES-BOWER, ANA (1992)
Professor
Philosophy
B.A., University of Puerto Rico
M.A., California State University, Long Beach

TRAGER, JULIE (2001)
Assistant Professor
Art History
B.F.A., Rhode Island School of Design
M.F.A., Bard College

TROUP, JACQUELYN A. (1991)
Instructor
Sociology
B.A., M.A., Pepperdine University

UKITA, TRACI (2001)
Instructor/Counselor
B.A., University of California, Los Angeles
M.S., California State University, Long Beach

VALENZUELA, RAUL (1990)
Associate Professor/Counselor (EOPS)
B.A., University of California, Irvine
M.S., California State University, Fullerton

VAN DE MORTEL, JOSEPH (1988)
Associate Professor
Philosophy
B.A., California State University, Fullerton
M.A., University of San Francisco

VASQUEZ, GRACIELA (1994)
Title V Project Director
B.A., M.A., University of California, Los Angeles

VOORHIES, ANN (2002)
Assistant Professor
Nursing Education
A.S., Purdue University
B.S., California State University, Dominguez Hills
M.S., California State University, Long Beach

VEGA, FRANK (2005)
Instructor
Automotive Mechanical Repair
A.A., Cerritos College
B.A., University of La Verne

VELA, NOELIA (2004)
President/Superintendent
B.A., M.A., Illinois State University
Ed.D., University of San Diego

WALDMAN, LINDA S. (1997)
Assistant Professor
Chemistry
A.S., Cypress Community College
B.S., California State University, Long Beach
M.S., Ph.D., University of California, Irvine

WALTER, ROBERT S. (1992)
Professor
Microbiology
B.S., M.S., University of Southwestern Louisiana
M.A., University of California, Los Angeles

WATANABE-LONSBURY, SUSAN (1991)
Associate Professor
Theatre Arts
B.A., California State University, Dominguez Hills
M.F.A, University of Southern California

WEDDELL, DONNA (2004)
Instructor
Dental Assisting
A.S., Rio Hondo College
B.V.E., California State University, Long Beach

WELL, GEORGIA (1983)
Associate Professor
Theatre Arts
A.A., Bakersfield Junior College
B.A., M.A., California State University, Long Beach

WELLIVER, KAREN M. (1988)
Professor
Health, Physical Education/Athletics
B.A., M.A., California State University, Long Beach

WELLS, DOUGLAS (1989)
Professor
Physical Education/Athletics
B.S., M.S., University of Utah

WHITE-GATLIN, BRENDA J. (1993)
Professor
Cosmetology
B.A., Union Institute

WHITSON, BEVERLY (1984)
Professor
English
A.A., Cerritos College
B.A., M.A., California State University, Fullerton

WILSON, CHRISTOPHER (2000)
Associate Professor
Art and Design
B.A., University of California, Irvine
M.E.A., Loyola Marymount University
WILSON, JACK (1999)
Assistant Professor
Computer and Information Sciences
B.A., M.S., California State University, Fullerton

WISSA, FARID F. (1988)
Professor
Engineering Design Technology
A.A., Cerritos College
B.V.E., M.A., California State University, Long Beach

YEAGER, MARTHA (1982)
Associate Professor
English as a Second Language
B.A., State University of New York, Buffalo
M.A., Michigan State University

YOUNG, DAVID A. (1987)
Professor/Counselor
B.A., California State University, Northridge
M.A., University of California, Los Angeles
Ph.D., University of Southern California

ZEWAİL, MERVAT (1984)
Professor
Chemistry
B.S., University of Alexandria, Egypt
Ph.D., University of Pennsylvania
ADAMS, KEITH  
Dean of Vocational Education/Extended Day  

AGUIRRE, RUDOLPH  
(1959-1987)  
Art  

ALLEGRE, JEAN  
(1964-1991)  
French  

ALLEN, ROBERT  
(1965-1991)  
Business-Accounting  

ANDERSON, LOWELL  
(1962-2003)  
Real Estate  

ANGLE, NANCY  
(1989-1999)  
Mathematics  

ARCHER, DONNY  
(1961-1981)  
Mathematics  

BAIRD, MARGARET W.  
(1963-1983)  
Office Occupations  

BAKER, EVERETT D.  
(1959-1989)  
Chemistry  

BALCH, DONALD  
(1962-1979)  
English  

Baley, John D.  
Mathematics/Computer Science  

BARAMKI, HENRIETTA  
Nursing Education  

BARKER, MATILDA  
(1989-2000)  
Sociology  

BARCLAY, LOIS  
(1964-1979)  
Cosmetology  

BAXTER, DORRIS  
(1957-1984)  
Chemistry  

BAYE, CONNIE  
(1966-2002)  
Health and Physical Education  

BEAM, ROGER D.  
(1975-1993)  
Automotive Technology  

BEHREND, SHARON  
(1976-1996)  
Nursing Education  

BELLOUGUE, ROLAND  
French  

BELROY, ALEXANDER  
(1964-2003)  
English  

BETZ, CHARLES R.  
(1962-1998)  
Economics  

BEULIGMANN, MARIE  
(1981-1999)  
Nursing Education  

BEYKIRCH, HELEN M.  
(1984-1993)  
Counselor  

BIBB, EVELYN R.  
(1958-1986)  
English  

BLACK, JOHN G.  
(1959-1989)  
Accounting  

BLACK, RHEA G.  
(1964-1999)  
Physical Education  

BLASZCZAK, FRANK  
(1962-1988)  
Machine Tool/Plastics Technology  

BLISS, BETTY  
(1965-1983)  
Dental Assisting  

BLOOMFIELD, EDWARD H.  
Philosophy  

BLUSKE, MARGARET  
(1958-1979)  
German  

BOCK, FRANK  
(1961-1988)  
Anthropology/Theatre  

BODANOVICH, JACK  
(1971-1998)  
Physical Education/Athletics  

BONNYCASTLE, WILLIAM L.  
(1960-1984)  
English  

BOODNICK, ALLAN  
(1965-1991)  
Counselor  

BOS, ROBERT KEMP  
(1958-1984)  
Counselor  

BOYDE, JOHN  
(1974-2006)  
Biology  

BRADY, LAWRENCE  
(1979-1999)  
Instructional Dean, Fine Arts and Communications  

BRADY, MELVIN  
(1963-1991)  
Business  

BROADBENT, LINDSEY  
(1966-79)  
Technical Mathematics  

BRODERICK, WILLIAM E.  
Reading  

BUFFALINI, ELIVIO G.  
(1967-1986)  
Counselor  

BURNIGHT, RALF R.  
(1956-62)  
President/Superintendent  

CABEEN, CHARLES  
(1958-1979)  
Psychology  

CALEY, DONALD  
(1965-1987)  
Marketing, Management, Business  

CAMPBELL, CLINTON P.  
(1965-1983)  
Sociology
CANNON, JOHN P.  
(1958-1980)  
Earth Science

CARLSON, BARBARA  
(1972-1985)  
Nursing

CARLSON, LELAND  
(1965-1967)  
Mathematics

CARLSON, NORMAN  
(1982-1991)  
Drafting

CARSON, CHARLOTTE  
(1963-1985)  
Nursing

CASKEY, WILLIAM  
(1961-1989)  
Accounting

CATES, CARROLL  
(1959-1988)  
Physical Education

CHADWICK, RALPH G.  
(1962-1980)  
Associate Dean, Technology

CHOWEN, JUDITH  
(1981-2006)  
Accounting

COLE, JOSEPH C.  
(1960-1973)  
Psychology

CONOVER, SANDY  
Nursing Education

COOK, EDWARD P.  
(1965-1981)  
Welding

COPPENGER, MICHAEL  
(1980-2004)  
Photography

CRACCHIOLO, EDITH E.  
(1964-2000)  
Psychology

CRANE, JULES  
(1962-1989)  
Biology

CROUSE, LOIS  
(1963-1980)  
Nursing Education

CUMMINGS, SELDEN  
(1965-1993)  
English

DARNALL, FLORENCE  
(1959-1977)  
Cosmetology

DAVIS, RICHARD H.  
(1975-2003)  
Computer and Information Sciences

DELEON, MANUEL  
(1964-1991)  
Art

DELYRE, WOLF R.  
(1966-1977)  
Dental Assisting

DENNY, PAUL  
(1962-1979)  
Business Education

DEREMO, GEORGE F., JR.  
(1971-1999)  
Art

DERMODY, EUGENE  
(1965-1997)  
History

DESFOR, DONALD  
(1957-1989)  
Photography/Physical Education

DIAZ, BEDAL  
(1963-1989)  
Counselor

DI CORPO, NELLO  
(1959-1992)  
Dean of Community/Continuing Education

DIGHERA, JAMES A.  
(1960-1986)  
Speech Communication

DOWDEN, JOHN  
(1961-1991)  
English

DOZIER, AMY L.  
(1958-1974)  
Physical Education and Recreation

DOZIER, PATRICIA  
(1989-2001)  
English as a Second Language

DOZIER, ROSE MARIE  
(1964-1989)  
French

DRANT, SANDRA  
Court Reporting

DUNKIN, V. EDWIN  
(1970-1984)  
Electronics

DURAN, AGNES H  
(1987-2004)  
Reading

ELIAS, ABUNDIO  
(1969-1992)  
Spanish

ENQUIST, MARVIN  
(1990-2005)  
Administration of Justice

ERJAVEC, DONALD  
(1965-1998)  
Music

ESCOBAR DE PATRYLA, LILLIAN  
(1974-1993)  
Child Development

EVANS, WILLIAM  
(1974-2002)  
Accounting

FALLAR, MARGARET  
(1965-1979)  
Nursing Education

FEENEY, JOHN  
(1958-1991)  
Music

FENNER, WILBURT  
(1972-1990)  
Art

FINLEY, ROBIN  
(1972-1994)  
Biology

FISCHER, LAWRENCE  
(1961-1992)  
English
Faculty Emeriti

FLEMING, RONALD  
(1963-1966)  
Business

FOERSTER, ROBERT  
Physical Education

FRAME, JAMES  
(1965-1991)  
Business Mathematics

FRANK, REX C.  
(1957-1977)  
Business

FRANKLEY, ALLEN G.  
Engineering Design Technology

FREIFIELD, MAX  
Speech Communication

FROST, WALLACE E.  
(1965-1989)  
Counselor

FULTS, JON  
(1968-1993)  
Business Computer Info Systems

GIANNONE, ANTHONY  
(1971-1991)  
Welding

GIRTNER, JOSEPH P.  
(1968-1998)  
Art

GRADISHAR, RUDOLPH L.  
(1965-1984)  
Business Law

GRAUPMAN, ALVINA  
(1957-1986)  
Office Occupations

GURRERA, BEN  
(1976-1985)  
Accounting

HALL, DONALD  
(1959-1979)  
Division Chairman, Health, P.E., and Recreation

HALLUM, ANDREW  
(1973-1992)  
Business/Disabled Student Programs

HARRINGTON, ROBERT  
(1966-1979)  
Data Processing

HARRIS, WAYNE  
(1965-1974)  
Physical Education

HART, OSCAR W.  
(1959-1977)  
Welding

HARTMAN, CLAUDE  
(1971-1992)  
Physical Science

HASSAN, GLORIA  
(1982-1999)  
Speech Communication

HENDERSON, SCOTT  
(1974-1997)  
Music

HENDRICKSON, THOM  
(1965-1989)  
Political Science/History

HENRY, PAUL L.  
(1957-1982)  
Machine Tool

HENTELL, DUCIA  
(1968-1982)  
Nursing Education

HENGSTOLER, ELIZABETH  
(1956-1977)  
Philosophy

HERR, FLORENCE S.  
(1973-1986)  
Business

HICKEY, X. RAYMOND  
(1959-1979)  
Electronics

HINRICHSN, KEITH  
(1965-2002)  
History

HOAD, GRETCHEN A.  
(1987-2002)  
Business Paralegal

HOFFLEND, CLYDE  
(1957-1982)  
Drafting

HOLLAND, ROGER  
(1976-1992)  
Business Administration

HOLMAN, JEAN LEE  
(1962-1974)  
Cosmetology

HOLSTEIGE, MARTIN  
(1962-1989)  
Mathematics

HOUSEMAN, PHIL  
Dean of Student Activities

HUBBELL, SILVIA R.  
(1966-1999)  
Spanish

HUBBRECHT, GLENN  
(1975-1991)  
Electronics

HUFFMAN, JOAN  
(1963-1991)  
Biology

HUGHLETT, ROBERT  
(1973-2005)  
Director, Disabled Student Program & Services

HUMISTON, GENEVIEVE  
(1957-1960)  
Dean of Admissions

HUNTER, FREDERICK  
(1973-1988)  
Business Education

IDEAL, BONNIE  
(1965 – 2002)  
Office Occupations

IKEMOTO, MILDRED  
(1967-1992)  
Instructional Dean/Health Occupations

INCOVRAVA, JOSEPH  
(1958-1978)  
Business

JACKSON, JOHN  
(1957-1991)  
Automotive Technology

JACKSON, THOMAS  
(1980-2002)  
Accounting
<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
<th>Department/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaeger, George A.</td>
<td>1965-2003</td>
<td>English</td>
</tr>
<tr>
<td>Jankowski, Shirley</td>
<td>1975-1990</td>
<td>College Nurse</td>
</tr>
<tr>
<td>Jenkins, Sarah</td>
<td>1959-1989</td>
<td>Librarian</td>
</tr>
<tr>
<td>Jennings, Stanley</td>
<td>1957-1985</td>
<td>History</td>
</tr>
<tr>
<td>Jeppesen, Jack</td>
<td>1964-1982</td>
<td>Economics</td>
</tr>
<tr>
<td>Johnson, Carl</td>
<td>1958-1976</td>
<td>Librarian</td>
</tr>
<tr>
<td>Johnson, William</td>
<td>1971-1991</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Jones, Betty Lou</td>
<td>1965-1989</td>
<td>Librarian</td>
</tr>
<tr>
<td>Jones, Margia</td>
<td>1974-1979</td>
<td>Business Education</td>
</tr>
<tr>
<td>Jordan, Robert</td>
<td>1960-1989</td>
<td>Sociology</td>
</tr>
<tr>
<td>Juliano, Richard</td>
<td>1965-1991</td>
<td>Instruction Dean, HPE/Athletics</td>
</tr>
<tr>
<td>Kamanski, Paul David</td>
<td>1959-1989</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Karvelis, Donald</td>
<td>1977-2003</td>
<td>History</td>
</tr>
<tr>
<td>Kelly, Nancy J.</td>
<td>1975-2002</td>
<td>Health, Physical Education</td>
</tr>
<tr>
<td>Kenny, James</td>
<td>1970-2002</td>
<td>Computer and Information Systems</td>
</tr>
<tr>
<td>Kerr, Joseph P.</td>
<td>1963-1966</td>
<td>Data Processing</td>
</tr>
<tr>
<td>Ketelle, William</td>
<td>1975-1992</td>
<td>Furniture Manufacturing Technology</td>
</tr>
<tr>
<td>Kincaid, Wallace</td>
<td>1957-1989</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Klein, Werner</td>
<td>1960-1976</td>
<td>Dental Assisting</td>
</tr>
<tr>
<td>Kleinerman, Joseph</td>
<td>1957-1987</td>
<td>Counselor</td>
</tr>
<tr>
<td>Korf, Lee</td>
<td>1958-1982</td>
<td>Theatre Arts</td>
</tr>
<tr>
<td>Korsmeier, Henry F.</td>
<td>1956-1969</td>
<td>Assistant Superintendent, Business</td>
</tr>
<tr>
<td>Krogue, R. Kent</td>
<td>1972-2005</td>
<td>Biology</td>
</tr>
<tr>
<td>Lackman, Jack</td>
<td>1965-1984</td>
<td>English</td>
</tr>
<tr>
<td>La Guardia, Patricia</td>
<td>1973-1998</td>
<td>Director, Assessment Center</td>
</tr>
<tr>
<td>Lahrs, William E.</td>
<td>1965-1983</td>
<td>Office Occupations</td>
</tr>
<tr>
<td>Laidlaw, Ruth F.</td>
<td>1964-1986</td>
<td>Home Economics</td>
</tr>
<tr>
<td>Lane, Wilma C.</td>
<td>1973-1989</td>
<td>Cosmetology</td>
</tr>
<tr>
<td>Lang, Jean H.</td>
<td>1972-1989</td>
<td>Nursing</td>
</tr>
<tr>
<td>Langdon, Dearesteen</td>
<td>1968-1991</td>
<td>Special Education</td>
</tr>
<tr>
<td>Layton, Donald W.</td>
<td>1962-1989</td>
<td>Earth Science</td>
</tr>
<tr>
<td>Lewis, William</td>
<td>1962-1989</td>
<td>Speech Communications</td>
</tr>
<tr>
<td>Licari, Joan</td>
<td>1966-2001</td>
<td>Geology</td>
</tr>
<tr>
<td>Littleton, Oscar</td>
<td>1958-1979</td>
<td>English</td>
</tr>
<tr>
<td>Lundgren, Austin</td>
<td>1965-1989</td>
<td>Accounting</td>
</tr>
<tr>
<td>Madden, John</td>
<td>1998-2006</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Magnuson, Walter C.</td>
<td>1973-1993</td>
<td>Vice President of Business Services</td>
</tr>
<tr>
<td>Maki, Roy E.</td>
<td>1963-1983</td>
<td>Business</td>
</tr>
<tr>
<td>Manire, Margaret V.</td>
<td>1959-1975</td>
<td>School Nurse</td>
</tr>
<tr>
<td>Mantz, Concetta</td>
<td>1973-1993</td>
<td>Sociology</td>
</tr>
<tr>
<td>Markham, Wendell C.</td>
<td>1965-1980</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Martin, Eugene</td>
<td>1957-1989</td>
<td>Director of Counseling</td>
</tr>
</tbody>
</table>
Faculty Emeriti

MARTINEZ, ORLANDO
(1991-1999)
Spanish

MARTINEZ, RUBEN
(1966-1991)
Spanish

MASTALER, RUDY
(1976-1987)
Technical Mathematics

MAYS, GLADYS
(1964-1979)
Mathematics

MCDANIEL, KATHLEEN H.
(1962-1982)
Business Education

MCGRATH, RICHARD F.
(1963-1999)
Administration of Justice

MCMAHON, GEORGE VINCENT
(1961-1984)
Technical Mathematics

MEDDOFF, JACK I.
(1966-1984)
Metallurgy

MERKLE, MICHAEL L.
(1982-1995)
Physical Education

MERRILL, MARY ALICE
(1962-1981)
Chemistry

MICHAEL, WILFORD
(1973-1986)
President-Superintendent

MILES, LYMAN C.
(1965-1983)
Administrative Assistant Learning Resources Center

MILLER, ROBERT
(1976-1990)
Administration of Justice

MILLS, MEILING
(1965-1989)
Biology/Anatomy & Physiology

MONTERA, FRANK J.
(1972-2003)
Physical Education/Athletics

MONTGOMERY, DONALD
(1967-1989)
Counselor

MOSER, BERNICE
Nursing Education

MOSES, SHERILL
(1963-1989)
Philosophy/Political Science

MYERS, ARLENE
Business

NEFF, JOHN
(1959-1982)
Anatomy and Physiology

NELSON, C. THOMAS
(1974-1996)
Journalism

NEW, BILL
(1964-1997)
Mathematics

NEWMAN, FRAN
(1972-1992)
Vice President of Student Services

NEVILLE, KENNETH C.
(1965-1986)
English/Spanish

NOGLE, DONALD G.
(1957-1986)
Counselor

NORMAN, DAVID
(1965-1974)
Data Processing

NUTTALL, ANN C.
(1970-1978)
English

ORR, MILDRED
(1971-1983)
Office Occupations

PAIGE, DEAN
(1964-1992)
Instructional Dean, Science/Engineering/Math

PALMER, JOHN
(1956-1976)
Political Science

PASCOE, RAYMOND
(1961-1989)
Mathematics

PELLONI, JR., JOHN
(1989-2000)
Cosmetology

PENDLETON, WILLIAM C.
(1960-1988)
Physical Education

PERKINS, SHERRY
(1979-2006)
Court Reporting

PETER, JAMES R.
(1961-1997)
Chemistry

PINDER, PATRICIA
(1978-1999)
Coordinator of Student Health & Wellness

PLOWMAN, LOIS
(1965-1982)
Business

PORTER, STANLEY
(1964-1991)
Music

POTTER, RAYMOND
(1962-1989)
Counselor

POWERS, LELA
Office Skills

POWERS, WILLIS
(1959-1979)
Mathematics

PRATT, JOHN
(1981-2005)
Nursing Education

PYKA, ANDREW J.
(1963-1976)
Engineering and Mathematics

REECE, JOHN A.
(1964-1988)
Administration of Justice

REGAN, PATRICIA
(1974-1994)
Medical Assisting
Faculty Emeriti

REW, WAYNE
(1970-1999)
Counselor

RINGWALD, SIEGFRIED
English/Law

ROBERTS, CECIL
(1971-1979)
Librarian

ROBERTS, EDITH
(1960-1980)
Physical Education

ROBINSON, ELLIS
Culinary Arts

ROBINSON, RICHARD B.
(1965-1986)
Associate Dean, Student Activities

RODRIGUEZ, ANTONIO
(1968-1989)
Speech Communication

ROSIER, RUDOLF
(1975-1992)
Baking

SAFERITE, EL WYN
(1957-1981)
General Business and Accounting

SANSON, DORIS
(1961-1979)
Division Chairman, Health Occupations

SAUCEDO, MARCELINO
(1972-1993)
Counselor

SCHAUMBURG, GARY
Psychology

SCHUTZ, JOAN
(1957-1979)
Division Chairman, Health, P.E. and Recreation

SCOTT, DICK
(1957-1980)
History

SCOTT, LACRETA
(1984-2002)
English

SCOTT, OLIVE P.
(1959-1986)
Vice President for Instructional Services

SEELY, GEORGE
(1959-1988)
Physics

SEWELL, DONALD
Counselor

SHARPE, DOLLIE
(1979-2001)
Cosmetology

SHAW, FRANK
(1966-1982)
Administration of Justice

SHAWVER, LOUIS REED
(1965-1984)
Industrial Supervision

SHOPPNER, JERRY
Autobody

SHOWMAN, FRANK
(1957-1989)
Physics

SHUTT, ROLAND P.
(1963-1972)
Art

SIEGEL, ALLAN B.
(1961-1993)
English

SIEGEL, FRANCES J.
(1962-1966)
History

SIMONEK, HAROLD R.
Physical Education/Athletics

SIRIANI, DON V.
(1957-1983)
Dean of Instructional Support

SMITH, RALPH
(1961-1983)
Drafting

SOKOLIK, JOSEPH
(1982-1991)
Technology

SPECHT, CARL H.
(1963-1982)
Administration of Justice

SPENCER, SONORA W.
(1960-1973)
Dental Assisting

SPETRINO, ALBERT
(1973-2005)
Disabled Student Programs and Services

STAGNER, EUGENE
(1969-1988)
Automotive Technology

STANLEY, DELMAR
(1961-1991)
Accounting/General Business

STERNER, WANDA
(1959-1992)
Chemistry/Energy

STORKAN, RUSSELL
(1965-2001)
History

STRAUSS, BENJAMIN G.
(1962-1967)
Data Processing

SUMNER, EDWARD M.
(1957-1970)
Electronics

SWIFT, ELIZABETH
(1987-2004)
Mathematics

TABOR, RON
(1965-1981)
Speech Communication

TASLITZ, HOWARD
(1964-1992)
History

TAYLOR, ROBERT A.
(1969-1983)
Philosophy/English

THOMPSON, SIDNEY L.
(1964-1984)
Librarian

TILGHMAN, CHARLES
(1965-1991)
Instructional Dean, Fine Arts and Communications
Tollefson, Glenn
(1965-1991)
Numerical Control

Treat, Marshall E.
(1956-1977)
Geology

Tucker, Roy
(1961-1991)
History/Political Science

Turnblom, Selma
Office Technologies

Tyne, James Patrick
(1963-1997)
Physical Education

Vatcher, Olga Siebert
(1957-1965)
Business Education

Venitsky, Juliette L.
(1957-1984)
Speech Communication

Vigil, Modesto
(1972-1993)
Autobody

Wagner, Charlotte F.
(1968-1978)
Speech Communication

Wagner, M. Edward
(1960-1975)
Dean of Admissions and Records

Walker, Joan
(1969-1993)
Cosmetology

Warden, Walter C.
(1957-1972)
Mathematics

Weaver, Edgar B.
(1962-1987)
Technology/Drafting

Weber, Nova Jean
(1964-1992)
English

Wegener, Helen
(1959-1986)
English

Weidman, Mary Lou
(1964-1993)
Office Occupations

Weigel, Camelia
(1960-1999)
English

Welch, Glorya
(1965-1986)
Chemistry and Mathematics

Wenick, Lillian
Reading

Wensman, Martin H.
(1963-1983)
Associate Dean, Business Division

Werther, Newton
(1964-2000)
Chemistry

Wessell, Douglas
(1968-1991)
Philosophy

Westerlin, Lee Moile
(1976-1991)
Instructional Dean, Business

Whalen, Margaret
(1964-1985)
Nursing Education

White, Louise
(1960-1980)
Nursing Education

Whiteman, Richard E.
Dean of Business and Industry

Whitlock, Thomas
(1964-1999)
Accounting/Business Law

Whitman, Corine
(1967-1981)
Nursing Education

Williams, George R.
(1964-1988)
Architecture

Williams, George R.
(1964-1988)
Business Administration

Williams, Lee H.
(1964-1972)
Director of Purchasing

Wilson, Louis
(1963-1985)
Mathematics

Wilson, Roy
(1971-2000)
Technical Math

Wolfe, Betty
(1990-2000)
Reading

Wolfe, Frederick C.
(1961-1987)
Counselor

Wood, Melvin
(1961-1983)
Art

Woods, Yvonne
Early Childhood Education

Wooliever, James D.
Computer and Information Sciences

Wright, Frank
(1965-2005)
Mathematics/Computer Sciences

Yee, Franklin
Ornamental Horticulture

Ysaia, Rey
(1965-2003)
Mathematics

Zive, Ina
(1972-2002)
Dental Hygiene
ACADEMIC AFFAIRS
BOYOL, MARIA
CASTRO, MONICA
CHAMBERS, PAMELA
EVANS, LEE
GALLANT, JOHN
KRISTINAT, LAURIE
O’DONNELL, DOROTHY
MITCHELL, KATERINE
A.A., Santa Fe Community College, Florida
B.A., California State University, Fullerton
NGUYEN, AMY
B.A., University of California, San Diego
M.A., Biola University

ADMISSIONS AND RECORDS
ALEGRE, ROSE
BADZEW, PAUL
A.A., Cerritos College
BERNABE, DELFINA
BOSS, DAVID
BOSS, SUE
A.A., Cerritos College
CAMPBELL, CHRISTINA
CARY, JOAN
A.A., Cerritos College
EAR, JOEY
A.A., Cerritos College
A.A., Long Beach City College
GUTIERREZ, VERONICA
LADMIRAULT, BARBARA
MEJIA, NATASHA
OTERO, KATHLEEN
PENESA, ROSMARY
PENDLETON, BENJAMIN
TOLSON, MIRIAM
TREVES, THERESE
VALLES, LISMA

BUSINESS EDUCATION
COOPER, JOHNNY
A.A., Cerritos College
B.S., M.A., Azusa Pacific University
ENGLAND, MICK
MATTISON, EVELYN
SENZ, JOYLEYNN

BUSINESS SERVICES
KAUFMAN, LINDA

CAMPUS POLICE
ALBANO, RANDY
BARRON, JAIRZINHIO
BRUSH, TOM
BUKOWIECKI, RICHARD

CLASSIFIED EMPLOYEES BY AREA

BUSTAMENTE, RICARDO
CASTILLO, ANGEL
CHAVEZ, MARIO
ECHavarria, JOHN
GARZA, ALEXIS
JAMISON, CARY
KOMADINA, DEBRA
O’ROURKE, CHARLOTTE
RAIMIREZ, TERRI
REYES, RENATO
Rios Jr., SANTIAGO
RODRIGUEZ, ESTER
SARABIA, DOMINIC
VELAZQUEZ, CARLO

CAREER SERVICES
ALVAREZ, REGINA
MOTA, MARIA LUISA
RODRIGUEZ, MARINA
THE, CHRISTINA
A.A., Cerritos College
B.A., California State University, Fullerton
M.B.A., California State University, Dominguez Hills
VASQUEZ, ROSARIO

CHILD DEVELOPMENT CENTER
FEIST, ASTRID
GONZALEZ, DEBRA
HARMON, JEANNE
KRAUSE, JUDITH
MARTUCCIO, LETICIA

COMMUNICATION CENTER
GARCIA, CARMEN
PESANTI, SHELLEY

COMMUNITY, INDUSTRY & TECHNOLOGY EDUCATION
CURRY, VICKY
ELIAS, VERONICA
GOMEZ, CHRISTINE
GREER, SALLY
GRIJALVA, TONI
HEAP, SUZANNE
HOGUE, KATHY
ISAI, LINDA
KLINE, GAYLE
A.A., Cerritos College
LO, CINDY
LOPEZ, IRLANDA
MARTINEZ, DARYABETH
NISHIMURA, LESLIE
A.A., Kapiolani Community College
B.S., California State University, Long Beach
PACE, CARI

COUNSELING
APPLEBURY, KIMBERLY
BELLO, FRANCESCA
RODRIGUEZ, MONIQUE
TOWHID, KRISTEN

DISABLED STUDENT PROGRAMS
AGUILAR, ISABEL
BOYCE, KAREN
BULANEC, JUDITH
A.A., Cerritos College
D’ETTORRE, MARY
GREENE, GERALDINE
TAYLOR, MARCIA
THOMPSON, ROBIN
A.A., Cerritos College
VALDIVIA, DAISY

E.O.P. OFFICE
AGUAYO, ROBERTO
AREVAO, SYLVIA
CHANAY, MARCIA

FACILITIES
AINSWORTH, JIMMY
AVILA, ARCADIO
BALCAZAR, MARIA
BELL, LESLIE
BORGES, JOSE
BORN, KENNETH
BUNTON, RONALD
BUTLER, KEVEN
CASTILLO, ESTELA
CHAVEZ, GILBERT
CHILDRESS, VICTOR
CONTRERAS, ROBERT
CRUZ, CLAUDIA
FLORES, DANIEL
GARCIA, JESUS
GOIS, PHILIP
GOMEZ, CAMERINA
GONZALES, ARMANDO
GRIFFIN, CHARLES
GROSCHONG, RICKY
GROVER, PATRICK
GUTIERREZ, LOUIS
HARKINS, DONALD
HOWARD, WALTER
HUNT, JOE
JONES, ELMER
KELLETT, MICHAEL
KORNBAU, GLENDA
A.A., Cerritos College
KREBS, DAVID
LEE, ROBERT
LEIGHTHITER, BRYAN
LINHARES, DOMINGOS
LUNA, DANIEL
MAHARI, KETMA
MARSHALL, DENISE
MCKINLEY, PATRICIA
MCKINNEY, DANIEL
MCLEOD, RODNEY
MELO, ANTONIO
MENDES, MANUEL
MENDEZ, SALVADOR
MORALES, JOSE
MORRIS, ARTHUR
OCAMPO, LUZ
PORRAS, GABRIEL
REEVES, JOHN
RYAN, PETER
SANCHEZ, HECTOR
SCHMITT, THOMAS
SEVILLA, CHARLES
TEKLE, GHEBREZGHI
TENERIO, BEN JOE
VILLALOBOS, MICHAEL
WADE, FRED
WHITE, EDWARD
WILLIAMS, FREDERICK

FINANCIAL AID
ALONZO, KARINA
CARRILLO, JUAN
CASTELLANOS, MARIA
CASTRO, VERONICA
CHAMBERS, JEAN
A.A., Cerritos College
B.A., California State University, Long Beach
FLORES, LINA
LEGUJARAZON, ADRIANA
LIPSOHN, RONDA
LONGORIA, ARMANDO
LOPEZ, ELENA
NEAL, EUGENIA
PEDROZA, MARICELA
QUIROZ, JAIME
A.A., Cerritos College
RAMIREZ, YESENIA
RODRIGUEZ, NORMA
A.A., Cerritos College
B.A., M.A., California State University, Dominguez Hills
TAFOYA, YVETTE
VEJAR, YAJAYRA
VERA, SYLVIA
WESTBY, KIM

FINE ARTS/COMMUNICATIONS
BLOCH, RENEE
CHAVEZ, THOMAS
CROTHER, RICHARD
EDQUIST, ALICIA
EDWARDS, ANNA
MEDINA, ROSEMARIE
WALTON, ETTA
B.A., M.A., California State University, Long Beach
WARD, DAVID
B.A., California State University, Long Beach
M.A., University of Michigan

FISCAL SERVICES
DONNEL, ARCEY
GUSS, GWENDOLYN
HARDJADINATA, ANNA
HART, DEANNA
B.A., National University, La Jolla
HUNTER, CONSTANCE
A.A., Cerritos College
LIN, REI-HSI
MORRIS, IGerna
MUNDWILLER, KEH LI
NEGHABAT, FARHAD
NGUYEN, HOAI PHONG
RADILLO, MAyRA
THEIN, JOHN
THOMAS, SCHELLARY
YOUNG, BARBARA

FOUNDATION
COLE, JANICE
A.A., Cerritos College
CORBITT, KIMBERLY

HEALTH OCCUPATIONS
ARANA, OLIVIA
CORTEZ, ARMANDO
KORN, LUANNE
KUSUMOTO, ALICE
LEW, ERNEST
MAJOR, AMBER
MUNoz, JESSICA
PETERSON, RICARD D
SENE, JANELL
A.A., Cerritos College

HUMAN RESOURCES
CARLOS, SHARLEEN
FLNN, BERYL
A.A., Cerritos College
B.A., Pacific Christian College
SHEIBE, DONNA
THOMPSON, BEVERLY

HUMANITIES/SOCIAL SCIENCES
ACOSTA, ALVA
GARTRELL, RONDA

INFORMATION TECHNOLOGY
ADAMS, ROGER
B.M., California State University, Long Beach
ALGERE, RAY
AZUCENA, MARIO
BECK, LESLIE
BELKNAP, ARLENE
CHILDRESS, PATRICIA
DRONEY, DOUGLAS
B.S., California Polytechnic State University, San Luis Obispo
DUANE, ERIK
ENGBRETSON, JAMES
B.A., California State University, Fullerton
FREEMAN, LAMONT
GARNER, RODNEY
GONZALES, ANTHONY
KYLINGSTAD, TIMOTHY
MEJIA, ALPHONSE
MORALES, MARIO
OTTOSEN, HARRY
RIEGERT, HARRY
RODRIGUEZ, GILBERT
SMITH, THOMAS
TANNER, BRUCE
M.S., California State University, Fullerton

INTERNATIONAL STUDENTS
MILLEN, BECKY
TILAHUN, DAVID

LIBERAL ARTS
FISCHER, ANNA
MAUINATU, SALA
NABULSI, ABIR
PIMENTEL, SUSANA
RUSHING, MARTHA
TAYLOR, MARGARET
WILMOVSKY, ALBERT

LIBRARY
ALAVIAN, MASoud
BRUGGER, ROBIN
FRASER, DEEANN
HO, ROBERT
MASSADAS, PAULA
Mertz, RONALD
RODRIGUEZ, VANESSA
SMUTS, LAURA
TAN, LINDA
PHYSICAL EDUCATION/ATHLETICS
ARMJO, LEONARD
BARRIOS, FELICITAS
CABLE, BRIAN
CHRACW, LUCY
ESTRADA, REFUGIO
ORTEGA, ELIAS
PINEDA, PAULA
ROMERO, LUCIA
SWEET, BEVERLY
VAN GASTON, JOHN
VELAZQUEZ-ORTEGA, MARIA
M.A., Azusa Pacific University
M.S., California State University, Fullerton
ZARRAHY, ANA

PRESIDENT’S OFFICE
JONES, ANDREA
MUN, JULIE
B.A., University of California, Los Angeles
THURY, CHERYL

PUBLICATIONS
LAUGHON, LYNN
A.A., Cerritos College
B.A., California State University, Fullerton
VIJAR, ROSEMARIE

PURCHASING
ARIS, MIGUEL
CASTRO, MADALYN
GOMEZ, MARIBEL
MELLGOZA, RAMONA
PINEDA-RUELAS, INEZ
SANTANILLA, NUBIA
SMITH, RICHARD
STEELE, JOHN
ZWEIP, MARLENE

RESEARCH AND DEVELOPMENT
DURDELLA, NATHAN
MORALES, JACQUELINE

PUBLIC AFFAIRS
ACUNA, MONICA
ARCEO, SHIRLEY
B.S., California Polytechnic State University, San Luis Obispo
HABBESTAD, KRISTEN
KWA, KELLY
RICHARDSON, MEGAN
WINNERS, MARGO
YBARRA, MICHAEL

SCIENCE/ENGINEERING/MATH
COLLINGS, LEANNA
DUKHOVNY, OLGA
HARRIS, LINDA
LAREDO, NORA
LEGASPIT, PATRICK
MERA, CARLOS
QUINTERO, ELIZABETH

STUDENT ACTIVITIES
FOSTER, TRUDY
MALLARD-JONES, NIKEETHA
PAGANO, DOREEN
WALLE, NANCY

STUDENT HEALTH & WELLNESS
DONOHE, LORI
RODRIGUEZ, ELIZABETH

STUDENT SERVICES
RIOS, ANITA

TECHNOLOGY
CAGLE, TROY
CASEY, LINDA
CORONADO, JESSICA
CORTEZ, VERONICA
DELLIMAGINE, TRUDY
FISCHER, STEPHANIE
JARA, ANMA
KECK, BEVERLY
KINGSTON, MICHELE
MITCHELL, ROXANNE
A.A., Cerritos College
MUSSAW, DAVID
PENDLETON, TLITHA
PEREA, NINA
REED, CAROLYN
REICH, SAVERNA
RODRIGUEZ, LUIS
A.A., Cerritos College
A.S., Citrus College
ROESE, JUSTUS
SHELTON, KEVIN
WILSON, ESTHER

TITLE V
ARELLANO, ROSALIA
REICH, SAVERNA
RODRIGUEZ, CHRISTINA
RODRIGUEZ, MICHELLE
THOMAS, DEBORAH
WATSON, BERNICE
WISNIEWSKI, MICHAEL
YVETTE, JUAREZ

TECHNOLOGY TRAINING & DISTANCE EDUCATION
BARRY, SAN
B.S., California State University, Long Beach
CHIU, IVY
FERNANDEZ-PEREZ, AMPARO
B.A., California State University, Fullerton
NGUYEN, NORMAN
RAMIREZ, SARAH
RODRIGUEZ, CHRISTINA
RODRIGUEZ, MICHELLE
THOMAS, DEBORAH
WATSON, BERNICE
WISNIEWSKI, MICHAEL
YVETTE, JUAREZ

TITLE V
ARELLANO, ROSALIA
NGUYEN, NORMAN
RAMIREZ, SARAH
RODRIGUEZ, CHRISTINA
RODRIGUEZ, MICHELLE
THOMAS, DEBORAH
WATSON, BERNICE
WISNIEWSKI, MICHAEL
YVETTE, JUAREZ

INNOVATION AND ACADEMIC SUPPORT
BARRY, SAN
B.S., California State University, Long Beach
FERNANDEZ-PEREZ, AMPARO
B.A., California State University, Fullerton
JUAREZ, YVETTE
LIANG, IVY
Index

A

Absences ........................................ 27
Academic Honesty ................................. 30
Academic Renewal ................................. 28
Academic Support Center ......................... 38
Accounting Courses
  (See Business Accounting) ................. 184
Accounting Major ............................... 70
Accounting Occupational Work Experience ... 186
Accreditation ........................................ 1
Add/Drop Procedures ............................ 16
Administration, College ......................... 5
Administration of Justice Courses .......... 159
Administration of Justice Major ............. 62
Admission of Minors ............................. 10
Admission to Class .............................. 16
Admission to the College ...................... 10
Adults, Classes For ............................ 58
Advanced Placement Exam Credit .......... 29
Agriculture Major .............................. 62
Anatomy & Physiology Courses .......... 161
Announcement of Courses ..................... 157
Anthropology Courses ......................... 162
Anthropology Major ............................. 62
Architectural Technology Major ............ 63
Architecture Courses ............................ 163
Architecture Major ............................... 63
Architecture Occupational Work Experience ... 163
Art and Design Courses ....................... 165
Art and Design Major ........................... 64
Assessment Test ................................... 13
Associate in Arts Degree, Requirements for ... 43
Associate in Arts Degree, Petition for ... 43
Associate in Arts Degree, Unit Requirements ... 45
Associated Students ............................. 31
Astronomy Courses ......................... 173
Athletics ........................................ 35
Attendance Regulations ......................... 27
Auditing Courses ............................... 16
Autobody Courses .............................. 173
Autobody Major ................................ 67
Automated Manufacturing .................. 243
Automotive Collision Repair (Autobody) .... 176
Occupational Work Experience ............. 176
Automotive Mechanical Repair Occupational ... Work Experience .................. 180
Automotive Technology Courses .......... 178
Automotive Technology Major ............. 68
Awards ........................................ 40

B

Bacteriology (See Microbiology) .............. 272
Band (See Music) ................................. 274
Basic Skills Course Limitations .............. 27
Biology Courses ................................. 183
Biology Major ...................................... 68
Bio, Medical Instrumentation Courses
  (See Electronics) .............................. 244
Board of Trustees .................................. 5
Bookkeeping (See Accounting) ............. 184
Book Store ......................................... 37
Botany Courses ................................. 184
Botany Major ..................................... 69
Broadcasting Courses
  (See Theatre Arts) ............................. 314
Business Administration Major ............. 73
Business Computerized Office Technologies
  Courses ............................................. 193
Business Computerized Office Technologies
  Program ........................................... 76
Business Communications Courses ......... 192
Business - Court Reporting .................. 198
Business Law Courses
  (See Business Administration) ............ 188
Business Management Courses
  (See Business Administration) ............. 188
Business Management Major .................. 74
Business Marketing Major ..................... 76
Business Paralegal .............................. 204

C

Cafeteria (See Food Services) ................. 37
Calendar (School Year) ...................... 3
Calligraphy Courses (See Art) ............... 168
CAlWORKS Program ......................... 37
CAN Numbers ..................................... 157
Career Center ..................................... 37
Career Services Center ....................... 37
Ceramics Courses (See Art) .................. 167
Cerritos College Foundation .................. 59
Certificates of Achievement .................. 60
Change of Address ............................. 22
Chemistry Courses ......................... 209
Chemistry Major .................................. 83
Chicano Studies Major ....................... 84
Child Development Center ................... 37
Child Development Courses .................. 210
Child Development Major .................... 84
Classification of Students .................... 23
Classified Employees ......................... 344
College Level Examination Program (CLEP) ... 30
College Units ...................................... 22
Community Education ....................... 58
Composites/Plastics Courses ................. 298
Composites/Plastics Major .................... 135
Computer and Information Sciences
  Courses ........................................... 214
Computer and Information Sciences Major ... 87
Continuance Attendance ....................... 43
Cosmetology Courses ......................... 226
Cosmetology Major ............................. 93
Costs - Attending College ................... 11
Counseling (Guidance Services) .......... 14
Counseling & Guidance Courses .......... 229

D

Dance  ...........................................
  (See Physical Education & Theatre) ....... 291, 313
Dean’s List ........................................ 40
Debate (See Speech) ........................... 310
Dental Assisting Courses ..................... 231
Dental Assisting Major ......................... 95
Dental Hygiene Courses ....................... 232
Dental Hygiene Major ........................... 96
Directed Studies ................................ 235
Disabled Students ............................... 35
Dismissal - Class or College ................. 27
Dismissal - Scholastic ......................... 27
Drama (See Theatre) ............................ 312
Dropping Classes .............................. 17

E

Early Childhood Major ......................... 84
Earth Science Courses ......................... 235
Economics Courses ............................. 236
Economics Major ................................. 99
Education/Elementary School Teachers
  Courses ........................................... 236
Educational Technology Major ............ 100
Educational Technology Courses .......... 237
Electronics Courses ............................ 241
Electronics Major ............................... 102
Electronics, Industrial Technology, Major ... 102
Emergency Medical Technician Course ........ 256
Employment (See Job Placement) .......... 37
Energy Courses ................................. 245
Engineering Courses .......................... 246
Engineering Design Technology Courses .... 246
Engineering Major ............................. 102
Engineering Design Tech Major ............ 103
English As A Second Language ............. 251
English As A Second Language Placement
  Exam ............................................. 14
English Courses ................................ 247
English Major ..................................... 104
Entrance Requirements ....................... 10
Equal Opportunity Policy ..................... 35
Escrow Courses ................................. 207
(See Business Real Estate) ................. 207
Expenses .......................................... 11
Extended Opportunities Program
  (E.O.P.S.) and Services ..................... 41

347
<table>
<thead>
<tr>
<th>F</th>
<th>Instructional Materials Fee .................................. 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fees ......................................................... 11</td>
<td></td>
</tr>
<tr>
<td>Final Examinations ........................................ 26</td>
<td></td>
</tr>
<tr>
<td>Finance Courses</td>
<td></td>
</tr>
<tr>
<td>(See Business Finance) .................................. 187</td>
<td></td>
</tr>
<tr>
<td>Financial Aids ............................................. 41</td>
<td></td>
</tr>
<tr>
<td>Food Services Courses</td>
<td></td>
</tr>
<tr>
<td>(See Culinary Arts) .................................... 230</td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td></td>
</tr>
<tr>
<td>(See French, German, Spanish) .......................... 310</td>
<td></td>
</tr>
<tr>
<td>Forensics (See Speech) .................................. 310</td>
<td></td>
</tr>
<tr>
<td>Forestry Major ............................................. 106</td>
<td></td>
</tr>
<tr>
<td>Foster/Kinship Care Education Programs .............. 38</td>
<td></td>
</tr>
<tr>
<td>French Courses ............................................. 253</td>
<td></td>
</tr>
<tr>
<td>French Major ................................................. 106</td>
<td></td>
</tr>
<tr>
<td>Furniture Mfg. Courses</td>
<td></td>
</tr>
<tr>
<td>(See Woodworking Mfg. Technologies) .................. 317</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>General Education</td>
</tr>
<tr>
<td>Graduation Requirements .................................. 44</td>
<td></td>
</tr>
<tr>
<td>General Education</td>
<td></td>
</tr>
<tr>
<td>State University Requirements .......................... 48</td>
<td></td>
</tr>
<tr>
<td>General Information ....................................... 9-59</td>
<td></td>
</tr>
<tr>
<td>Geography Courses ........................................ 253</td>
<td></td>
</tr>
<tr>
<td>Geography Major .......................................... 107</td>
<td></td>
</tr>
<tr>
<td>Geology Courses ............................................ 254</td>
<td></td>
</tr>
<tr>
<td>Geology Major ................................................. 107</td>
<td></td>
</tr>
<tr>
<td>German Courses ............................................. 254</td>
<td></td>
</tr>
<tr>
<td>German Major ................................................ 108</td>
<td></td>
</tr>
<tr>
<td>Grade Reports ............................................... 26</td>
<td></td>
</tr>
<tr>
<td>Grades Grievance Policy .................................. 33</td>
<td></td>
</tr>
<tr>
<td>Grading .......................................................... 26</td>
<td></td>
</tr>
<tr>
<td>Graduation Requirements .................................. 44</td>
<td></td>
</tr>
<tr>
<td>Graphic Design</td>
<td></td>
</tr>
<tr>
<td>(See Art and Design) ...................................... 165</td>
<td></td>
</tr>
<tr>
<td>Guidance Services (See Counseling) .................... 14</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Health Education Courses .................................. 255</td>
</tr>
<tr>
<td>Health Occupations Courses ............................. 256</td>
<td></td>
</tr>
<tr>
<td>Health Services ............................................. 36</td>
<td></td>
</tr>
<tr>
<td>High School Students (Veysey Program) ............... 10</td>
<td></td>
</tr>
<tr>
<td>History Courses ............................................. 257</td>
<td></td>
</tr>
<tr>
<td>History Major ................................................ 109</td>
<td></td>
</tr>
<tr>
<td>History, Cerritos College ................................. 6</td>
<td></td>
</tr>
<tr>
<td>Honors and Awards ........................................... 40</td>
<td></td>
</tr>
<tr>
<td>Honors - Graduates .......................................... 40</td>
<td></td>
</tr>
<tr>
<td>Humanities Courses ......................................... 260</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Industrial Arts Education Major ............................ 109</td>
</tr>
<tr>
<td>Industrial Technology Majors ............................. 110</td>
<td></td>
</tr>
<tr>
<td>Information, Academic ...................................... 9</td>
<td></td>
</tr>
<tr>
<td>Instructional Media Services (See LRC) ........................ 38</td>
<td></td>
</tr>
<tr>
<td>Insurance - Student .......................................... 36</td>
<td></td>
</tr>
<tr>
<td>International Students ..................................... 10</td>
<td></td>
</tr>
<tr>
<td>International Studies Program ............................ 112</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>Job Placement .................................................. 37</td>
</tr>
<tr>
<td>Journalism Courses ......................................... 261</td>
<td></td>
</tr>
<tr>
<td>Journalism Major ............................................ 113</td>
<td></td>
</tr>
<tr>
<td>Jury Duty ...................................................... 27</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>Law Enforcement (See Administration of Justice) ........ 159</td>
</tr>
<tr>
<td>Learning Communities Program ............................ 25</td>
<td></td>
</tr>
<tr>
<td>Learning Resource Center (LRC) ........................... 38</td>
<td></td>
</tr>
<tr>
<td>Legal Assistant Courses (See Business Legal) ......... 204</td>
<td></td>
</tr>
<tr>
<td>Liberal Arts and Science ................................... 115</td>
<td></td>
</tr>
<tr>
<td>Library Services ............................................. 38</td>
<td></td>
</tr>
<tr>
<td>Library Courses .............................................. 263</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>Machine Tool Technology Courses ............................ 263</td>
</tr>
<tr>
<td>Machine Tool Technology Major .......................... 115</td>
<td></td>
</tr>
<tr>
<td>Major Requirements - Graduation ......................... 45</td>
<td></td>
</tr>
<tr>
<td>Major Requirements - Programs ........................... 60</td>
<td></td>
</tr>
<tr>
<td>Management Courses (See Business Administration) .. 188</td>
<td></td>
</tr>
<tr>
<td>Management Major ............................................ 74</td>
<td></td>
</tr>
<tr>
<td>Manufacturing Technology Major ........................ 116</td>
<td></td>
</tr>
<tr>
<td>Manufacturing Technology Courses ........................ 265</td>
<td></td>
</tr>
<tr>
<td>Marine Biology Courses .................................... 183</td>
<td></td>
</tr>
<tr>
<td>Mathematics Courses (also see Technical Mathematics) 311</td>
<td></td>
</tr>
<tr>
<td>Mathematics Major .......................................... 117</td>
<td></td>
</tr>
<tr>
<td>Medical Assistant Courses ................................ 269</td>
<td></td>
</tr>
<tr>
<td>Medical Assistant Major ................................... 118</td>
<td></td>
</tr>
<tr>
<td>Mental Health Worker Major ............................... 120</td>
<td></td>
</tr>
<tr>
<td>Merchandising (See Business Marketing) ................ 76</td>
<td></td>
</tr>
<tr>
<td>Metallurgy and Material Science Major .................. 120</td>
<td></td>
</tr>
<tr>
<td>Metals (General) Courses ................................... 270</td>
<td></td>
</tr>
<tr>
<td>Mexican American Studies (See Chicano Studies) ..... 84</td>
<td></td>
</tr>
<tr>
<td>Microbiology Courses ....................................... 272</td>
<td></td>
</tr>
<tr>
<td>Microbiology Major ......................................... 121</td>
<td></td>
</tr>
<tr>
<td>Military Withdrawal ......................................... 23</td>
<td></td>
</tr>
<tr>
<td>Minor (Business Administration) .......................... 71</td>
<td></td>
</tr>
<tr>
<td>Minor (Business Legal) ....................................... 80</td>
<td></td>
</tr>
<tr>
<td>Minors (Admission) .......................................... 10</td>
<td></td>
</tr>
<tr>
<td>Multimedia</td>
<td></td>
</tr>
<tr>
<td>(See Art and Design) ....................................... 170</td>
<td></td>
</tr>
<tr>
<td>Music Courses ................................................. 272</td>
<td></td>
</tr>
<tr>
<td>Music Major ................................................... 121</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>Natural Sciences-General Major ............................. 123</td>
</tr>
<tr>
<td>Numerical Control Courses (See Machine Tool Technology) 263</td>
<td></td>
</tr>
<tr>
<td>Numerical Control Major (See Machine Tool Technology) 115</td>
<td></td>
</tr>
<tr>
<td>Nursing - Associate Degree Courses .................... 278</td>
<td></td>
</tr>
<tr>
<td>Nursing - Associate Degree Major ....................... 123</td>
<td></td>
</tr>
<tr>
<td>Nursing - Transfer Major ................................... 127</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>Office Technologies Courses (See Business Computerized Office Technologies) 193</td>
</tr>
<tr>
<td>Office Technologies Major .................................. 77</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>Paralegal Courses ............................................. 204</td>
</tr>
<tr>
<td>Pharmacy Technician Courses ............................. 280</td>
<td></td>
</tr>
<tr>
<td>Pharmacy Technician Major ................................ 128</td>
<td></td>
</tr>
<tr>
<td>Philosophy Courses ......................................... 281</td>
<td></td>
</tr>
<tr>
<td>Philosophy Major ............................................. 129</td>
<td></td>
</tr>
<tr>
<td>Philosophy of the College ................................ 8</td>
<td></td>
</tr>
<tr>
<td>Photography Courses ......................................... 282</td>
<td></td>
</tr>
<tr>
<td>Photography Major .......................................... 130</td>
<td></td>
</tr>
<tr>
<td>Physical Education Courses ............................... 284</td>
<td></td>
</tr>
<tr>
<td>Physical Education Major .................................. 130</td>
<td></td>
</tr>
<tr>
<td>Physical Science Courses .................................. 296</td>
<td></td>
</tr>
<tr>
<td>Physical Therapist Assistant Courses .................... 296</td>
<td></td>
</tr>
<tr>
<td>Physical Therapist Assistant Major ...................... 133</td>
<td></td>
</tr>
<tr>
<td>Physics Courses .............................................. 298</td>
<td></td>
</tr>
<tr>
<td>Physics Major ................................................ 134</td>
<td></td>
</tr>
<tr>
<td>Physiology &amp; Anatomy Courses ............................ 161</td>
<td></td>
</tr>
<tr>
<td>Place.ment Tests .............................................. 13</td>
<td></td>
</tr>
<tr>
<td>Plastics Manufacturing Technology Courses .......... 298</td>
<td></td>
</tr>
<tr>
<td>Plastics Manufacturing Major .............................. 135</td>
<td></td>
</tr>
<tr>
<td>Police Science (See Administration of Justice) ...... 159</td>
<td></td>
</tr>
<tr>
<td>Political Science Courses .................................. 301</td>
<td></td>
</tr>
<tr>
<td>Political Science Major .................................... 136</td>
<td></td>
</tr>
<tr>
<td>Pre-Chiropractic Major ..................................... 136</td>
<td></td>
</tr>
<tr>
<td>Pre-Dental Major ............................................. 137</td>
<td></td>
</tr>
<tr>
<td>Pre-Medical Major ............................................ 138</td>
<td></td>
</tr>
<tr>
<td>Pre-Optometry Major ........................................ 139</td>
<td></td>
</tr>
<tr>
<td>Pre-Pharmacy Major .......................................... 140</td>
<td></td>
</tr>
<tr>
<td>Pre-Physical Therapy Major ............................... 142</td>
<td></td>
</tr>
<tr>
<td>Pre-Veterinary Major ........................................ 142</td>
<td></td>
</tr>
<tr>
<td>Prerequisites, Corequisites and Recommendations ... 14</td>
<td></td>
</tr>
<tr>
<td>Printmaking Courses (See Art) ............................ 166</td>
<td></td>
</tr>
<tr>
<td>Probation - Scholastic ...................................... 26</td>
<td></td>
</tr>
<tr>
<td>Psychology Courses .......................................... 302</td>
<td></td>
</tr>
<tr>
<td>Psychology Major ............................................ 143</td>
<td></td>
</tr>
</tbody>
</table>
Index

R
Radio (See Broadcasting) ..................... 303
Reading Courses ............................. 304
Real Estate Courses
(See Business Real Estate). .............. 207
Real Estate Major ......................... 82
Re-entry Resource Program ............... 37
Refund Policies & Procedures ............. 11
Registration Information .................. 16
Reinstatement, After Dismissal .......... 27
Repetition of Courses ....................... 17
Requirements - Admissions ............... 13
Requirements - Attendance ................. 27
Requirements - Graduation ............... 44
Requirements - Residence ................. 10
Requirements - Scholarship (Financial Aid) .. 41
Requirements - Scholarship (Academic) .... 26
Retention Awards Program ................. 40
Robotics ..................................... 243

S
Scholars' Honors Program ................. 24
Scholarship - Regulations ................. 26
Scholarship and Grants ..................... 42
Sculpture Courses (See Art) ............... 168
Secretarial Major ........................... 78
Secretarial Science Courses
(See Business Computerized Office
   Technologies) ......................... 193
Security, Industrial
(See Administration of Justice) ......... 159
Sexual Assault & Acquaintance Rape Policy .. 38
Sexual Harassment ......................... 38
Shorthand Courses ......................... 198
Sign Language Courses ................. 305
Social Welfare Major ..................... 145
Sociology Courses ......................... 305
Sociology Major ............................ 146
Spanish Courses ........................... 306
Spanish Major ............................. 147
Special High School Students (Veysey) .... 10
Speech Courses ............................ 308
Speech Major .............................. 148
Speech Language Pathology Courses ....... 310
Speech Language Pathology Major ......... 148
Speed Reading ............................ 304
Sports (See Athletics) ...................... 35
State University & Colleges Transfer ... 52
Statistics Courses
(see MATH 112, PSYC 210) ............... 198
Stenotype Courses
(See Business Court Reporting) ........ 198
Student Conduct Policy ................... 33
Student Grades or Grades Grievance Policy .. 33
Student Grievance Policy ................. 32
Student Rights & Responsibilities ....... 31
Students - Associated ..................... 31
Students - Financial Aid ................... 41

T
Table of Contents ........................... 2
Teacher Credential Preparation ............ 149
Technical Mathematics Courses
   (also see Mathematics) ................. 311
Television & Radio Courses ............... 303
Theatre Courses ........................... 311
Theatre Major ............................. 152
Transcripts - for Admission ............... 10
Transcripts - of Record ................... 26
Transfer Center ............................ 37
Transfer to Four Year Institution ....... 52
Tuition (Fees) .............................. 11
Typewriting Courses
(See Business Computerized Office
   Technologies) ......................... 187

U
Unit Credit for Military Service ............ 23
University Requirements .................. 53

V
Veterans - Assistance ..................... 42
Veysey Program
(See Special High School Students) ..... 10

W
Welding Courses ........................... 315
Welding Major ............................. 153
Wildlife (Game) Management Major ......... 154
Withdrawals - from Class ................. 26
Withdrawals - from College ............... 26
Women's Studies Courses ................. 316
Women's Studies Major ................... 154
Woodworking Courses ..................... 317
Woodworking Mfg. Technologies Major ... 154
Word Processing Courses
(See Business Computerized Office
   Technologies) ......................... 193
Word Processing Major ................... 78
Work Study ............................... 41

Z
Zoology Courses ........................... 323
Zoology Major ............................. 156
CERRITOS COLLEGE’S POLICY

It is the policy of Cerritos College to implement and maintain the provisions of the Drug-Free Schools and Communities Act amendments of 1989. The college’s policy clearly prohibits the unlawful possession, use, or distribution of illicit drug or alcohol by students and employees on campus or as part of any of its activities.

INFORMATION REGARDING LEGAL SANCTIONS UNDER FEDERAL, STATE, AND LOCAL LAWS IS AVAILABLE IN THE FOLLOWING LOCATIONS:

1. Library
2. Human Resources
3. Student Activities Office
4. Assessment Center
5. Health and Wellness Office

ALCOHOL/DRUG ABUSE COUNSELING, TREATMENT, REHABILITATION INFORMATION:

Referral information and Social Service Directories for Los Angeles and Orange Counties are available in the following locations:

1. Counseling Center, ext. 2231
2. Student Health and Wellness Center, ext. 2321
3. Adult Reentry, ext. 2362

HEALTH RISKS
WHAT CAN HAPPEN TO YOUR BODY

<table>
<thead>
<tr>
<th>DRUG</th>
<th>Initial Use</th>
<th>Chronic Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALCOHOL</td>
<td>• Heart beats faster and weaker</td>
<td>• Permanent liver, heart, brain damage</td>
</tr>
<tr>
<td></td>
<td>• Become clumsy and stagger</td>
<td>• Liver cancer</td>
</tr>
<tr>
<td></td>
<td>• Get confused and can't concentrate</td>
<td>• Stomach ulcers</td>
</tr>
<tr>
<td></td>
<td>• Feel sick to your stomach, vomit</td>
<td>• High blood pressure</td>
</tr>
<tr>
<td></td>
<td>• Mood changes quickly to violence or depression</td>
<td>• Alcoholism</td>
</tr>
<tr>
<td>COCAINE/CRACK</td>
<td>• Heart beats faster/blood pressure rises</td>
<td>• Permanent lung damage</td>
</tr>
<tr>
<td></td>
<td>• Body temperature rises</td>
<td>• Holes and ulcers inside nose</td>
</tr>
<tr>
<td></td>
<td>• Breathe faster</td>
<td>• Personality changes/violent behavior</td>
</tr>
<tr>
<td></td>
<td>• Can't sit still or sleep</td>
<td>• Fear of people and things (paranoia)</td>
</tr>
<tr>
<td>MARIJUANA</td>
<td>• Feel calm, relaxed, sleepy</td>
<td>• See things that aren't real (hallucinate)</td>
</tr>
<tr>
<td></td>
<td>• Heart beats faster</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reaction time slows down</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Throat, mouth, and lips get dry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Eyes get bloodshot, eyesight blurs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lose sense of time</td>
<td></td>
</tr>
<tr>
<td>STEROIDS</td>
<td>• Heart beats faster/blood pressure rises</td>
<td>• Heart attacks</td>
</tr>
<tr>
<td></td>
<td>• Become more alert</td>
<td>• Liver cancer</td>
</tr>
<tr>
<td></td>
<td>• Feel dizzy and shaky</td>
<td>• Stop growing taller</td>
</tr>
<tr>
<td></td>
<td>• Can't sit still or sleep</td>
<td>• Impotency</td>
</tr>
<tr>
<td></td>
<td>• Breath smells bad, mouth and lips dry out</td>
<td>• Dysmenorrhea</td>
</tr>
<tr>
<td>TOBACCO</td>
<td>• Heart beats faster/blood pressure rises</td>
<td>• Lung and heart damage</td>
</tr>
<tr>
<td></td>
<td>• Feel sick to your stomach</td>
<td>• Lung, mouth, and throat cancer</td>
</tr>
<tr>
<td></td>
<td>• Feel dizzy</td>
<td>• Stomach ulcers</td>
</tr>
<tr>
<td></td>
<td>• Feelings of tension/tiredness</td>
<td>• High blood pressure</td>
</tr>
<tr>
<td></td>
<td>• Breath smells bad, teeth stained</td>
<td>• Sense of taste and smell reduced</td>
</tr>
</tbody>
</table>