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.

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2008-2009 ACADEMIC CALENDAR*

FALL SEMESTER 2008
Instruction Begins ................................... August 18, 2008
Final Examinations .................................. December 13-19, 2008
Fall Semester Ends .............................. December 19, 2008

SPRING SEMESTER 2009
Instruction Begins .................................. January 12, 2009
Final Examinations .................................. May 16-22, 2009
Spring Semester Ends .............................. May 22, 2009
Commencement ..................................... May 16, 2009

HOLIDAYS (The College will be closed)
Independence Day ..................................... July 4, 2008
Labor Day ............................................. September 1, 2008
Veterans Day Observance ...................... November 11, 2008
Thanksgiving Holiday ............................ November 27-30, 2008
Winter Holiday ................................. December 24, 2008 – January 1, 2009
Dr. Martin Luther King, Jr's Birthday Observance ... January 19, 2009
Abraham Lincoln's Birthday Observance ........ February 13, 2009
George Washington's Birthday Observance ... February 16, 2009
Good Friday .............................................. April 10, 2009
Memorial Day ........................................... May 25, 2009

RECESS
Semester Break ...................... December 22, 2008-January 9, 2009
Spring Recess ................................. April 6-12, 2009

*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 five 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 Internet at www.cerritos.edu/police.
WHOM TO CONTACT
Telephone: (562) 860-2451

GENERAL OFFICES .................................. EXT
President/Superintendent .................................. 2204
Academic Affairs ........................................... 2227
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Auto Maintenance/Repair .................................. 2930
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BOARD OF TRUSTEES

President ............................................. Mr. Bob Arthur
Vice President .......................................... Mr. Bob Epple
Secretary ................................................. Dr. Bob Hughlett
Member ................................................. Ms. Carmen Avalos
Member .................................................. Dr. Tina Cho
Member ............................................... Mr. Tom Jackson
Student Member ...................................... Mr. Jason Macias

ADMINISTRATION

Acting President/Superintendent .......... Mr. William C. Farmer, Jr.
Vice President of Academic Affairs/
Assistant Superintendent .........................
Interim Vice President of Business Services/
Assistant Superintendent ......................... Dr. James Albanese
Vice President of Student Services/
Assistant Superintendent ......................... Dr. Stephen B. Johnson
Dean of Academic Affairs ...................... Mr. M.L. Bettino
Interim Dean of the Library and Learning
Resource Center ..................................... Mr. John J. McGinnis
Executive Dean of Community, Industry and
Technology Education .............................. Mr. Nick Kremmer
Executive Dean of Information Technology and
Development .............................................
Executive Director of Foundation .......... Mr. Steven Richardson
Administrative Dean of Innovation &
Academic Support ...................................
Instructional Dean of Business Education .... Ms. Rachel Mason
Instructional Dean/Health Occupations ....... Ms. Jenine Nolan
Instructional Dean/Humanities and
Social Sciences ...................................... Ms. Francine DeFrance
Instructional Dean/Fine Arts/Communications ... Dr. Connie Mayfield
Instructional Dean/Liberal Arts ................... Dr. Linda Rose
Instructional Dean/HPE/Athletics .............. Dr. Daniel Smith
Instructional Dean/Science, Engineering and
Mathematics ............................................ Dr. Carolyn Chambers
Instructional Dean/Technology ................. Dr. Randy W. Peebles
Director of Foster/ Kinship Education Programs .... Ms. Lori Switanowski
Director of Research and Planning .......... Dr. Nathan Durdella

COMMUNITY EDUCATION

Director of Community Education ........... Ms. Patricia Robbins Smith
Director of Adult Education/Diversity Programs .. Ms. Graciela Vasquez
Director of Economic Development ............
Director of Pathway Programs ................... Ms. Maggie Cordero

FACILITIES SERVICES

Director of Physical Plant ......................... Mr. Robert Riffe
Facilities Manager ................................. Mr. Thomas Richey
Operations Manager ......................... Mr. 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 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 Public and Governmental Relations ...... Mr. Mark Wallace
Web Administrator ............................. Mr. Taylor Bowman

STUDENT SERVICES

Dean of Admissions, Records and Services .... Ms. Stephanie Murguia
Dean of Counseling Services ............. Ms. Renée DeLong Chomiak
Director of Career and Assessment Services .. Ms. Theresa Lopez
Chief of Campus Police .......................... Mr. Richard Bukowiecki
Dean of Disabled Student Programs and Services .... Dr. Lucinda Aborn
Acting Dean of Student Support Services ....... Ms. Kim Westby
Coordinator of Student Health Services ...... Ms. Nancy Montgomery
Coordinator of International Student Services .... Ms. Danita Kurtz
Coordinator of Judicial Affairs .................. Mr. Gary Cain
Coordinator of Student Activities ................ Mr. Dean Ackland
Director of Student Activities .................. Ms. Holly Bogdanovich
Coordinator of CalWORKs Services ........ Ms. Norma Rodriguez

FACULTY SENATE

Faculty Senate President ...................... Dr. Bryan Reece

CERRITOS COLLEGE FACULTY FEDERATION – AFT

CCFF-AFT President ......................... Dr. Ted Stolze

CALIFORNIA SCHOOL EMPLOYEES ASSOCIATION

CSEA President ............................. Ms. Lynn Laughon
Cerritos College General Catalog

HISTORY

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 trustees—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 1970’s 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 drawing 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.

In the mid 1990’s, the college underwent five 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 online 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 with 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 for 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 untread 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.

In 2005, Cerritos College celebrated its golden anniversary through the special events and 50th Anniversary Scholarships honoring the college’s 50 years of tradition, honor and values.
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.
ACADEMIC INFORMATION
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 who shows evidence of being able to benefit from instruction. Students who are 18 years of age without a high school diploma must meet the College’s ability to benefit criteria, which may be satisfied by a passing score on the numerical, reading, and/or writing exam. 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, disability 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://www.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 application, Admissions and Records will issue enrollment appointments for use on MyCerritos and Falcon Phone. 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.

APPLICATION AND ENROLLMENT OF SPECIAL ADMIT MINORS

Special Admit Minors are students enrolled in grades K-12 without high school diplomas, who can benefit from “advanced scholastic or career/technical work.”

HIGH SCHOOL JUNIORS AND SENIORS (COLLEGE BRIDGE PROGRAM)

1. High school principal or designee must recommend and verify with consent and signature on the Special Admit Minor Form student would benefit from college instruction.
2. Parent/guardian must approve student’s participation with consent and signature on the Special Admit Minor Form. Signature of parent/guardian also acknowledges that the student will conform to all College policies and procedures.

Academic Eligibility

- Students wishing to enroll in degree appropriate courses must have a cumulative high school grade point average of 2.0 or better shown on their most recent school transcript.
- For all courses attempted, students must complete the appropriate College assessment process and meet the stated prerequisite and/or co-requisite for the desired course.
- Students with a disability will be referred to Disabled Student Programs and Services for assessment, verification, and recommendations. For more information, please call (562) 860-2451, Ext. 2335.

Limitations on Enrollment

- A high school junior or senior student may be permitted to enroll in up to 8 units. Exceptions may be made, subject to consideration and approval by the Dean of Admissions, Records and Services (A, R & S).
- Students may not enroll in pre-collegiate courses (1-99) or physical education courses.
- Students may not enroll in a College course to alleviate a high school deficiency;
- Students who have previously enrolled and who have dropped their courses and/or have not made satisfactory progress will not be allowed to continue in the College Bridge Program.
- Students will not receive priority enrollment status and will be charged all applicable fees, with the exception of the California Community College in-state per unit enrollment fee.

ELEMENTARY AND SECONDARY STUDENTS THROUGH THE 10TH GRADE (SPECIAL ADMIT PROGRAM)

1. High school principal or designee must recommend and verify with consent and signature on the Special Admit Minor Form student would benefit from college instruction.
2. Parent/guardian must approve student’s participation with consent and signature on the Special Admit Minor Form. Signature of parent/guardian also acknowledges that the student will conform to all College policies and procedures.

Cerritos College will admit highly gifted elementary students and secondary students through the 10th grade level for enrollment to the College if they are eligible to participate based on the criteria below:

Academic Eligibility

- Students must have a cumulative school grade point average of 2.5, or better, as reflected on their most recent school transcript.
- For all courses attempted, the students must complete the appropriate College assessment process and meet the stated prerequisite and/or co-requisite for the desired course.
- Students with a disability will be referred to Disabled Student Programs and Services for assessment, verification, and recommendations. For more information, please call (562) 860-2451, Ext. 2335.
Limitations on Enrollment

Students will be allowed to enroll in up to 4 units each term; enrollment in courses is based on space availability; and College instructor signature required prior to enrollment, and

- may not enroll in pre-collegiate courses (1-99) or physical education courses.
- may not enroll in a College course to alleviate a high school deficiency.
- if previously enrolled and dropped courses and/or have not made satisfactory progress, will not be allowed to continue in the Special Admit Program.
- Will not receive priority enrollment status and will be charged all applicable fees, except California Community College in-state per unit enrollment fees.

SUMMER ENROLLMENT OF K-12 STUDENTS

In addition to the above, minor students wishing to attend summer session must meet the additional criteria:

- The student demonstrates adequate preparation in the discipline to be studied.
- Pre-collegiate courses in English and mathematics may be taken if the student has exhausted all opportunities to enroll in an equivalent course at their school of attendance.

TO ATTEND CERRITOS COLLEGE AS A COLLEGE BRIDGE OR SPECIAL ADMIT STUDENT, PLEASE FOLLOW STEPS BELOW:

1. Complete the Special Admit Minor Form (check box for College Bridge or Special Admit) and the Cerritos College Admission Application.
2. Review class(es) of choice, complete Assessment Test(s) and pre-requisites.
3. Special Admit Students (K-10) must obtain Dean of A, R & S signature prior to enrollment.

It is recommended that College Bridge students (11-12 graders) meet with a Cerritos College academic counselor and participate in New Student Orientation.

For more information, please call (562) 860-2451, Ext. 2211.

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/isc 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 students (fee of $25 for readmit students)
- Statement of Support (notarized)
- Bank Certification (verification on bank letterhead signed by a bank official showing at least $22,000 USD available to the student or equivalent.)
- TB exam results
- Transcripts (proof of high school graduation)
- TOEFL (minimum score of 450+ paper and pencil; 133+ computerized; 45+ on internet based test), S.T.E.P. or equivalent
- Cerritos College Placement Test (CPT)
- 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* ($210.00 per unit) ....... 7,000
- Books and supplies ..................................... 1,600
- Student Health fees ..................................... 28
- Student Activity fees .................................. 20
- Health Insurance (mandatory) ......................... 740
- Living expenses (approx.) .............................. 11,840
- Parking permit (optional if you have a vehicle) ...... 40
- Approx. total for the year: ........................... $21,308

Approx. tuition fees per semester based on 12 units: .... $2,800

*Fees are subject to legislative or other authorized 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.FMIFee.com.

For further information contact:

Cerritos College
International Student Center
11110 Alondra Blvd.
Norwalk, CA 90650-6298 USA
E-mail: dkurtz@cerritos.edu
www.cerritos.edu/isc
Phone: (562) 860-2451, Ext. 2133
Fax: (562) 467-5086

Expenses

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

STUDENT FEES

*Fees are subject to legislative or other authorized changes without prior notice.

1. Enrollment fees for the community college student are $20 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 a non-resident tuition fee of $181 per unit. The international student fee is $181 per unit plus $9 per unit capital outlay fee, PAYABLE AT THE TIME OF ENROLLMENT. 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.

3. Student Health Fee is $14.00 per semester, $11.00 for Summer Session. Students who rely on prayer for healing and can supply the college with documentation from their spiritual leader are exempt.

4. Student Activity 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.

All fees must be paid within 5 days. Failure to do so will result in a delinquent debt to the institution and a restrictive hold to your student account (transcripts, graduation and future enrollments will be stopped). If you drop a class and have not paid the fees, you are still responsible for the debt on your account.

REQUIRED INSTRUCTIONAL AND OTHER MATERIALS FEES

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. These fees are not covered by the Board of Governors Grant (BOGG) Waiver. (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 if all classes are dropped by the required deadline:

a. classes are dropped by the required deadline;

b. the drop/withdrawal 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. The refund will be issued in the form of a check and will be mailed. The check will be made out in the student's name. A correct address is very important to receive your refund in a timely manner. 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. Student Activity 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. The Student Activity ID Card and parking sticker must be surrendered at the time the student applies for the refund. However, if the student paid for but did not receive their ID sticker or parking permit, the student must pick them up before applying 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 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. 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 www.cerritos.edu/counseling.

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. Online applications may be submitted at www.cerritos.edu by selecting “MyCerritos” and then “Student Application – Online”. 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, Ext. 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 Assessment Testing Center is located in the Administration Building next to the Career Services Center.

"ASSESSMENT/PLACEIEMENT" 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 AA 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 AA 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 web site at www.cerritos.edu/career-services; or call (562) 860-2451, Ext. 2355, for dates and times.

Assessment/Placement Test Exemptions

Students who already possess an AA 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.

Individual Assessment Exceptions for Course Placement

English

If you have completed English 100 (formerly English 1) or an equivalent three or four unit college-level composition course with a "C" grade or higher at an accredited college, you are exempt from the English Assessment/Placement. Please submit official proof (grade reports or transcripts) to a counselor prior to enrollment.
Basic Math
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.

Advanced Math
Students who achieve MATH 60 (formerly MATH 30) clearance on the Basic Math Readiness Test may take one of the appropriate Advanced Math Tests to determine their math level.

Students may be placed in advanced math courses based on a “B” grade or higher in recently completed high school or college algebra courses. It is strongly recommended that these math courses have been completed within the past three years. Proof of high school or college grades is required.

Advanced Placement Courses
Students who participate in advanced placement courses at their high schools and score 3, 4, or 5 on the College Board Advanced Placement Examination will be granted units toward the AA degree.

Chemistry
Please read the prerequisites and recommendations section with each Chemistry class listing. Be sure that the prerequisites are satisfied before enrolling in a course.

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:

Basic Math Readiness . . . . . . . May be repeated one time AFTER one semester waiting period.
Intermediate Algebra Readiness . . . May be repeated one time AFTER one semester waiting period.
Advanced Math Readiness . . . . . May be repeated one time AFTER one semester waiting period.
Calculus . . . . . . . . . . . . . . . . May be repeated one time AFTER one semester waiting period.
Reading . . . . . . . . . . . . . . . . May be repeated one time AFTER one semester waiting period.
English . . . . . . . . . . . . . . . . May be repeated one time AFTER one semester waiting period.
CELSA . . . . . . . . . . . . . . . . May be repeated one time AFTER one semester waiting period.

ACCOMMODATION FOR INDIVIDUALS WITH DISABILITIES
Any student with a verified disability may arrange an accommodation for alternative test administration of English, reading, mathematics, and ESL placement tests. Prior to requesting an accommodation, a current Cerritos College application must be on file. Advance reservations may be made by contacting Disabled Student Programs and Services, (562) 860-2451, Ext. 2333. Alternative test administration may include extended time, large print, readers and scribes.

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.

Students currently enrolled in a prerequisite course at Cerritos College will be allowed to enroll in the next sequenced course. For example, students enrolled in ENGL 52 for fall may enroll in ENGL 100 for spring. However, it is the student’s responsibility to verify they have passed the prerequisite course. If a passing grade is not received, the student will be dropped some time during the semester.

Automated prerequisite checking will stop students from enrolling in a class that has a required prerequisite you have not yet met. Prerequisites are checked at the time of enrollment (Auto-enroll and Instructor adds). Prerequisites are not checked when added to shopping cart.

To avoid being denied enrollment, students should complete the Cerritos College placement tests or submit transcripts if prerequisite coursework was completed at another institution. Transcripts and or grade cards are accepted in the Admissions and Records Office. Complete the Requisite Clearance Request Form available from Counseling, Admissions and Records, or download the form at www.cerritos.edu/prerequisites.

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 in 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 60, he/she must take PHAR 60L 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. “Passing grade” is at least a grade of “C” (satisfactory). Credit will not be granted for substandard course work (“D”, “F”, or “FW”).

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 “P”.

WHAT IS THE PREREQUISITE CHALLENGE AND WAIVER PROCEDURE FOR STUDENTS?

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

If you believe that you meet the requirements, then the College may waive a prerequisite. A Requisite Challenge and Waiver Form can be obtained upon request from the Admissions and Records Office, Counseling Center, or downloaded from www.cerritos.edu/prerequisites.

It is the student’s responsibility to provide information to support the challenge and waiver. The petition must be filed and resolved prior to the student’s enrollment into the course.

Criteria for waiving a course:
1. You have the knowledge or the ability to succeed in the course without the prerequisite.

Criteria for challenging a course:
1. The course which provides the prerequisite is not available.
OR
2. You believe that the prerequisite is discriminatory or is being applied in a discriminatory manner.
OR
3. 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 to establish that prerequisites have been met.

If you submit the Requisite Clearance Request Form and your request is denied, you must submit the Requisite Challenge and Waiver Form to the Counseling Department. Your appeal 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 by mail of the committee’s determination within five (5) working days.
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 at http://cms.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 Department for hours scheduled for walk-in counseling.

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.

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 class or classes for no credit or notation on the 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 the official transcript. Prerequisite checking is not required.

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 class. (The first day of the class refers to the actual first class 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 the instructor's written permission. Audit fees are non-refundable 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 the instructor's written permission. Credit fees are non-refundable 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 PROCEDURES

If you wish to add to your class program, please follow the steps below:

1. Complete an Add/Drop card (available in the Admissions and Records Office) or you may add via MyCerritos (www.my.cerritos.edu) or Falcon Phone.
2. 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 business days of your request. Failure to do so will result in a delinquent debt to the institution and a restrictive hold to your student account (transcripts, graduation and future enrollments will be stopped). If you drop a class after the refund date and have not paid the fees, you are still responsible for the debt on your account. Please check your student account via MyCerritos (www.my.cerritos.edu), 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, it is the student’s responsibility to participate fully in class(es), once enrollment is complete. However, should it become necessary to drop a class, it is the student’s responsibility to present to the Admissions and Records office, a student signed drop card.

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

Failure to officially drop from class(es) may result in an “F” grade for each class and a delinquent debt and restrictive hold to the student’s account.

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

Deadlines for dropping 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 drop 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 “W” in the same class two or more times, loses the privilege of priority enrollment for that class. 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 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 degree applicable 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 computer system checks for course repetition at the time of enrollment. 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 “W’s,” or any combination of one substandard grade and one “W”.
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.

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>TIMES</th>
<th>MAX</th>
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<td>Structural Damage Repair</td>
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<td>2</td>
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<td>AB 53</td>
<td>Suspension, Alignment and Power Train Damage</td>
<td>4.5</td>
<td>2</td>
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<td>AB 54</td>
<td>Advanced Design Automotive Panel Repair</td>
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<td>AB 55</td>
<td>Structural Panel Replacement</td>
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<td>Structural Automotive Welding</td>
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<td>Gas Tungsten Arc Welding Applications</td>
<td>2.0 2</td>
<td></td>
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<tr>
<td>WMT 43/44</td>
<td>Woodworking Manufacturing Tech Occ Work Experience</td>
<td>3-4 4</td>
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<tr>
<td>WMT 102</td>
<td>Introduction to Solid Wood Casegoods</td>
<td>4.0 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 103</td>
<td>Introduction to Tables</td>
<td>4.0 2</td>
<td></td>
<td></td>
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<tr>
<td>WMT 107</td>
<td>Wood Finishing</td>
<td>3.0 2</td>
<td></td>
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<tr>
<td>WMT 108</td>
<td>Wood Carving for Furniture</td>
<td>2.5 2</td>
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<tr>
<td>WMT 111L</td>
<td>Introduction to Woodworking Lab</td>
<td>1.0 4</td>
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<tr>
<td>WMT 115</td>
<td>Scroll Saw Fretwork and Intarsia</td>
<td>2.0 2</td>
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<tr>
<td>WMT 117</td>
<td>Woodworking Appreciation</td>
<td>1.0 3</td>
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<tr>
<td>WMT 118</td>
<td>Introduction to Woodworking</td>
<td>2.0 2</td>
<td></td>
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<tr>
<td>WMT 119L</td>
<td>Introduction to Woodturning Lab</td>
<td>1.0 4</td>
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<tr>
<td>WMT 130</td>
<td>Furniture Design</td>
<td>3.0 2</td>
<td></td>
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<tr>
<td>WMT 132</td>
<td>Chair Design and Construction</td>
<td>4.0 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 134</td>
<td>Frame Making</td>
<td>4.0 4</td>
<td></td>
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<tr>
<td>WMT 137</td>
<td>Outdoor Furniture</td>
<td>2.5 4</td>
<td></td>
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<tr>
<td>WMT 144</td>
<td>Jigs and Fixtures</td>
<td>2.0 2</td>
<td></td>
<td></td>
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<tr>
<td>WMT 148</td>
<td>Furniture Making and Manufacturing</td>
<td>4.0 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 151</td>
<td>Intro to Faceframe Cabinetmaking</td>
<td>4.0 2</td>
<td></td>
<td></td>
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<tr>
<td>WMT 153</td>
<td>32mm System of Cabinetmaking</td>
<td>4.0 2</td>
<td></td>
<td></td>
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<tr>
<td>WMT 154</td>
<td>Intro to Cabinet Installation</td>
<td>3.0 2</td>
<td></td>
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<tr>
<td>WMT 155</td>
<td>Architectural Millwork</td>
<td>4.0 4</td>
<td></td>
<td></td>
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<tr>
<td>WMT 157</td>
<td>Passage Door</td>
<td>4.0 2</td>
<td></td>
<td></td>
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<tr>
<td>WMT 159</td>
<td>Solid Surface Fabrication</td>
<td>4.0 2</td>
<td></td>
<td></td>
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<tr>
<td>WMT 171</td>
<td>Introduction to Wooden Boat Building</td>
<td>3.0 2</td>
<td></td>
<td></td>
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<tr>
<td>WMT 181</td>
<td>Introduction to Computer Operations for Cabinetmaking and Design</td>
<td>3.0 2</td>
<td></td>
<td></td>
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<tr>
<td>WMT 201</td>
<td>Woodworking with Hand Tools</td>
<td>4.0 4</td>
<td></td>
<td></td>
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<tr>
<td>WMT 202</td>
<td>Advanced Furniture Case Goods</td>
<td>4.0 2</td>
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<tr>
<td>WMT 203</td>
<td>Wood Veneering</td>
<td>4.0 2</td>
<td></td>
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<tr>
<td>WMT 204</td>
<td>Advanced Tables</td>
<td>4.0 2</td>
<td></td>
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</tr>
<tr>
<td>WMT 211</td>
<td>The Workbench Class</td>
<td>4.0 4</td>
<td></td>
<td></td>
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<tr>
<td>WMT 212</td>
<td>Routers and Router Tables</td>
<td>4.0 4</td>
<td></td>
<td></td>
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<tr>
<td>WMT 218</td>
<td>Polychromatic and Closed Form Turning</td>
<td>3.0 2</td>
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<td></td>
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<tr>
<td>WMT 219L</td>
<td>Woodturning Lab</td>
<td>1.0 4</td>
<td></td>
<td></td>
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<tr>
<td>WMT 228L</td>
<td>Production Furniture Making and Manufacturing</td>
<td>1.0 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 229L</td>
<td>Comprehensive Woodworking Manufacturing Specialty</td>
<td>2.5 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 233</td>
<td>Morris Chair</td>
<td>4.0 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 235</td>
<td>Windsor Chair</td>
<td>3.0 2</td>
<td></td>
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<tr>
<td>WMT 239L</td>
<td>Traditional Furniture Lab</td>
<td>1.0 2</td>
<td></td>
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</tr>
<tr>
<td>WMT 241</td>
<td>Special Topics in Handtool</td>
<td>2.0 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 244</td>
<td>Chest of Drawers</td>
<td>4.0 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 246</td>
<td>Rocking Chair</td>
<td>4.0 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 248</td>
<td>Production Furniture Making and Manufacturing</td>
<td>4.0 3</td>
<td></td>
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</tr>
<tr>
<td>WMT 249L</td>
<td>Furniture Manufacturing Specialty</td>
<td>2.5 4</td>
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<tr>
<td>WMT 250</td>
<td>Intermediate Faceframe Cabinetmaking</td>
<td>4.0 4</td>
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</tr>
<tr>
<td>WMT 251</td>
<td>Advanced Cabinetmaking</td>
<td>4.0 4</td>
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<tr>
<td>WMT 252</td>
<td>Intermediate 32MM System Cabinetmaking</td>
<td>4.0 4</td>
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<tr>
<td>WMT 253</td>
<td>Advanced 32MM System of Cabinetmaking</td>
<td>4.0 4</td>
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<td></td>
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<tr>
<td>WMT 258</td>
<td>Mantels and Wall Systems</td>
<td>4.0 2</td>
<td></td>
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<tr>
<td>WMT 259L</td>
<td>Solid Surface Manufacturing Specialty Lab</td>
<td>2.5 4</td>
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<tr>
<td>WMT 268A</td>
<td>Production Cabinetmaking</td>
<td>5.0 2</td>
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</tr>
<tr>
<td>WMT 268B</td>
<td>Production Cabinetmaking &amp; Manufacturing (Residential)</td>
<td>5.0 2</td>
<td></td>
<td></td>
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<tr>
<td>WMT 268C</td>
<td>Production Cabinetmaking &amp; Manufacturing (Mass Production)</td>
<td>5.0 2</td>
<td></td>
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<tr>
<td>WMT 269L</td>
<td>Cabinetmaking Manufacturing Specialty</td>
<td>2.5 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMT 281</td>
<td>Advanced Computer Operations for Cabinetmaking and Design</td>
<td>2.5 2</td>
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</tr>
</tbody>
</table>
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”, “Student Center”, “Personal Information.”

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 AA 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>Class</th>
<th>Description</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>College Bridge</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. Students may not enroll in a College course to alleviate a high school deficiency.</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 designed 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 $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 (meters do not dispense change/no refunds). Students may not park in staff parking lots or stalls unless they are disabled and have a valid “DP” plate or placard AND a student parking permit displayed. During the first week of each semester, parking is free in student stalls. See the class schedule for exact dates. 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:

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHITE</td>
<td>Student parking, current term or daily student parking permit required.</td>
</tr>
<tr>
<td>YELLOW</td>
<td>Faculty and staff, permit required.</td>
</tr>
<tr>
<td>GREEN</td>
<td>Timed coin-operated meters.</td>
</tr>
<tr>
<td>BLUE</td>
<td>Handicapped-DMV permit and Cerritos College permit required.</td>
</tr>
<tr>
<td>WHITE GRID MARKED</td>
<td>Motorcycle parking only.</td>
</tr>
<tr>
<td>PINK</td>
<td>Cosmetology patron parking-located in Lot C-11. Pink cosmetology patron parking permit required.</td>
</tr>
</tbody>
</table>
| 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 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 can be purchased at the Campus Police Department in accordance with the fees indicated.

REFUNDS

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

LIABILITY

Cerritos College assumes no liability and is not responsible 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
- Private honors graduation ceremony
- Travel to national and regional conferences
- Free library privileges at UCLA and UC Irvine
- Priority admission or priority consideration for admission at:
  - UC Irvine
  - Occidental College
  - UCLA
  - Pitzer College
  - UC Riverside
  - Pomona College
  - Chapman University
  - University of San Diego
  - Loyola Marymount University
  - 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 — 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 placement tests or other means) readiness to start English 100: Freshman Composition
- All students must demonstrate (through placement tests or other means) readiness to start MATH 80: Intermediate Algebra
- 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:

Timothy Juntilla
Director, Scholars’ Honors Program
(562) 860-2451 Ext. 2828; tjuntilla@cerritos.edu
OR
Cerritos College
The Scholars’ Honors Program
(562) 860-2451, Ext. 2728; shp-info@cerritos.edu
On the Web: 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. To enroll in a learning community, you must enroll in all courses in the learning community before exiting MyCerritos. To enroll in the FYE program, please call Ext. 2782.

FALCON PHONE

Follow the step-by-step instructions 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 numbers. If you encounter any other problems, 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</th>
<th>Grade Points</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>P</td>
<td>Pass (at least satisfactory, the equivalent of a “C”; units awarded not counted in GPA)</td>
<td>0</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass (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).

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.

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. Students who attended prior to 2000 and have not attended since, are not able to use MyCerritos. Official transcripts are still available online at www.cerritos.edu, “Students”, “Transcripts”.

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 completed, and the percentage of all units attempted and for which entries of “W”, “I”, and “NP” are recorded does not reach or exceed 50 percent.

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 attempted 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 which the students have attempted and for which entries of “W”, “I”, and “NP” 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 “NP” entries to less than 50 percent of all
   units in which the students have attempted.

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 “NP” are recorded in at least two (2) consecutive semesters
   reaches or exceeds 50 percent. Students subject to progress
   dismissal shall be placed on continued probation when for their
   latest semester no “W,” “I,” or “NP” 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 “NP” entries is less
   than 50 percent of all units in which the students have enrolled.

   Petitions must be filed prior to the deadline indicated on the
   readmission petition.

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. Failure to do so may
result in removal of their name from the roll to allow another student
seeking admission 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 41, 42, 43, 44, 46

“Basic Skills course work” refers to pre-collegiate basic skills courses
(i.e., courses in reading, writing, computing, 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 “NP”) 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 up to 30 units substandard course work attempted 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 after the 30 units of course work 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 the 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 ensure 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, Records, and Services.

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 the department 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 course is approved for “Credit by Examination.” (See Schedule of Classes for list of approved courses.)
3. Student has met prerequisite(s) for the course.
4. The student has not already received credit for a more advanced course which follows this course in sequence.
5. The student has not previously challenged this course.
6. 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 15 units through “Credit by Examination.”

Those students planning to transfer should be advised that credit by exam grades may not be accepted.

PASS/NO PASS COURSES
Title 5, California Administrative Code, permits the granting of credit toward a degree or certificate for courses completed on a pass/no pass basis.
A. Non-Optional:
   The courses are graded entirely on a pass/no pass 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 pass/no pass policy.
B. Optional:
   The option to enroll with the pass/no pass 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 AA Degree, but will be disregarded in determining grade point average.

Courses with the pass/no pass grade option will be indicated on the student’s permanent record as “P” with units earned and no grade points or “NP” with no units earned and no grade points. Units attempted for which “NP” 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 pass/no pass grading option through the Admissions and Records Office. Courses selected for pass/no pass grading must be on the approved list which appears in the Schedule of Classes. No more than fifteen (15) units of pass/no pass courses may be completed at Cerritos College, nor may more than fifteen (15) units earned on a pass/no pass basis be applied toward the Associate in Arts degree. Some courses are graded entirely on a pass/no pass basis. These courses are indicated in the Schedule of Classes. Units earned in such courses shall not be considered as a part of the 15 unit limit in the optional pass/no pass policy.

The pass/no pass grading option is available only within the first 30% of the course. Students wishing to change pass/no pass to a letter grade may do so only within the first 30% of courses. See the Schedule of Classes for details and deadlines.
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 (AA), 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 Students in this catalog and contact the International Student Center at (562) 860-2451, Ext. 2133; Fax (562) 467-5086; or e-mail dkurtz@cerritos.edu.

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 AA 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 AA degree (Plan A) as follows:

### AP Subject

<table>
<thead>
<tr>
<th>Subject</th>
<th>Number of Units</th>
<th>Cerritos College AA 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>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:</td>
<td>3 semester units</td>
<td>6 b. (3)</td>
</tr>
<tr>
<td>United States</td>
<td>3 semester units</td>
<td>6 b. (3)</td>
</tr>
<tr>
<td>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>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>

Students planning to use AP credits toward transfer requirements should consult the transfer institution regarding its policy. Policies do 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 AA degree.

**Also satisfies the Mathematics Proficiency Requirement for the AA 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 (Plan A) 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 (Plan A).

Credit for CLEP exams is granted as follows:

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

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

**Also satisfies the Mathematics Proficiency Requirement for the AA 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.
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 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 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 subject 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.
GRIEVANCE PROCEDURE: STEP I - INFORMAL ACTION

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 Responsibilities," or any State, Federal, or local codes. Grades and grading grievances are not covered by this policy. Students should refer to "Grades or Grading Grievance Policy."
10. Evidence and testimony given in each case presented shall not be the sole cause of initiating or filing further grievances.

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

12. The number of instructional 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 by discussion and consensus on a workable solution. Voting should be a last course of action.

14. If in the course of the proceedings, a student graduates before a solution is found, the student shall not be denied full consideration under this policy. A student may also submit a grievance after graduation if the grievance did not become known until that time. However, it must be submitted within thirty (30) instructional days after the grievant should have reasonably become aware of the act or condition on which the complaint is based.

STEP III - APPEALS PROCESS

1. If either party is dissatisfied with the recommendation of the Hearing Committee, an appeal must be submitted within ten (10) instructional days to the College President/ Superintendent provided the President is not a direct party to the grievance. If the President is a party to the grievance, and either party is dissatisfied with the recommendation of the Hearing Committee, an appeal may be submitted directly to a Vice President, provided the Vice President is not a direct party to the grievance.

2. Upon receiving the findings and recommendations of the Hearing Committee, and after examination of the appeal as requested by either party, the President or alternate may accept or reject the Hearing Committee’s decision.

3. If the President or alternate rejects the Hearing Committee’s decision, he or she shall submit his/her decision with the stated reasons for objections to the Hearing Committee within ten (10) instructional days. The Hearing Committee shall within ten (10) instructional days reconsider its decision(s) and re-submit them to the President for a final decision.

4. The President shall transmit his final decision to both parties and the Faculty Senate vice chairman or designee within ten (10) instructional days.

5. An appeal of the President’s decision may be submitted to the Board of Trustees by either party within five (5) instructional days of the President’s decision. The Board may review an appeal for two (2) consecutive regular Board meetings before making a final determination of the matter at the District level.

6. The President or Board of Trustees may change a Hearing Committee’s decision only after reviewing a transcription of the hearing.

STUDENT GRADES OR GRADING GRIEVANCE POLICY

In accordance with the Statement of Student Rights and Responsibilities, Section: “Classroom Rights and Responsibilities,” this policy describes the procedure by which a student of Cerritos College may present his/her grievance on grades or grading practices.

The California Education Code, Section 76224, quoted below, states clearly the conditions upon which grades or grading can be questioned.

“When grades are given for any courses of instruction taught in a community college district, the grade given to each student shall be determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetency, shall be final.”

GRADE GRIEVANCE PROCEDURE: STEP I

A student who believes a final grade received was due to mistake, fraud, bad faith, or incompetency shall meet with the faculty member to resolve his/her concern.

STEP II

1. The student will obtain a grade grievance form from the Office of Judicial Affairs.

2. The student must return the grade grievance form to the Office of Judicial Affairs within thirty (30) instructional days after the completion of the course for which the grievance was filed. An instructional 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 days 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 grade grievance form to the Division Dean. The Division Dean may schedule a meeting of all concerned if appropriate. The Division Dean should schedule a meeting only if the form has the signature of the Coordinator of Judicial Affairs and is dated. The Division Dean shall make a recommendation to the parties within ten (10) instructional days.

STEP III

If either party is dissatisfied with the recommendation of the Division Dean, he/she may appeal the matter to the Vice President of Academic Affairs or designee within ten (10) instructional days of each recommendation. The Vice President of Academic Affairs or designee shall call a meeting with the student, the ASCC Chief Justice, Division Dean, and if needed, the faculty member. The Vice President of Academic Affairs or designee shall make a recommendation to the parties within ten (10) instructional 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 President of the College within ten (10) instructional 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 and if needed, request persons involved in the grievance to meet.

The President shall make a recommendation within ten (10) instructional 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) instructional days after the President’s recommendation. The Board may review an appeal for two (2) consecutive regular Board meetings, and if needed, request persons involved in the grievance to appear before making a final determination of the matter at the District 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. Assault, battery, or any threat of force or violence, or causing, attempting to cause, or threatening to cause physical injury to another person.
2. Possession, use, sale, or otherwise furnishing any firearm, knife, explosive, or other dangerous object or chemical, including but not limited to any facsimile firearm, knife, or explosive on District-owned or controlled property or at District-sponsored or supervised functions without the prior authorization of the President/Superintendent or designee.
3. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in Chapter 2 (commencing with Section 11053) of Division 10 of the California Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging, or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code, Section 11014.5.
4. Committing or attempting to commit robbery or extortion.
5. Theft, attempted theft of, or willful damage to District property or property in the possession of, or owned by, a member of the college community or knowingly receiving stolen property or private property on District premises.
6. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the District.
7. Committing sexual harassment as defined by law or by District policies and procedures.
8. Engaging in harassing or discriminatory behavior based on race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other status protected by law.
9. Willful misconduct that results in injury or death to a student or to District personnel or that results in cutting, defacing, or other injury to any real or personal property owned by the District or on campus.
10. Disruptive behavior, continual or willful disobedience and/or persistent defiance of the authority, habitual profanity or vulgarity, or abuse of District personnel or where the presence of the student causes a continuing danger to the physical safety of students or others.
11. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty.
12. Dishonesty; forgery; alteration or misuse of District documents, records, or identification; or knowingly furnishing false information to the District.
13. Unauthorized entry upon or use of District facilities.
14. Lewd, indecent or obscene conduct on District-owned or controlled property, or at District-sponsored or supervised functions.
15. Engaging in expression that is obscene; libelous or slanderous; or that so incites students as to create a clear and present danger of the commission of unlawful acts on college premises, or the violation of lawful District administrative procedures, or the substantial disruption of the orderly operation of the District.
16. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
17. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any Board policy or administrative procedure.
18. Unauthorized use of audio, video or other listening, recording or transmitting device in any classroom, service area or District activity without prior consent of the instructor, service area manager, or activity advisor except as necessary for reasonable accommodation.
19. Sexual assault and/or battery; rape, including acquaintance rape; or physical abuse of another person.
20. Misrepresentation of oneself or of an organization to be an agent of the District.
21. Continued disruption on or off District property of the District's educational or student services activities, administrative functions and procedures, public service functions, authorized curricular or co-curricular activities, other functions, or prevention of authorized guests from carrying out the purpose for which they are on District property.
22. Abuse of any person or any possession of any person, on District-owned or controlled property.
23. Violation of state or local laws, Board policies, or administrative procedures concerning the registration of student organizations, the use of District facilities, or the time, place, and manner of public expression.
24. Abusive behavior directed toward coercion of, or hazing of a member of the college community.
25. Violation of Board policies or administrative procedures governing the use of student user accounts, computers, and telecommunication resources, including but not limited to the unauthorized entry, opening, or viewing of a file, the unauthorized use of another individual's identification and password, sending obscene or abusive messages or files, and/or use of computing facilities to interfere with the work of another student or employee of District.
26. Engaging in physical or verbal disruption, intimidation, or harassment of such severity or pervasiveness as to have the purpose or effect of unreasonably interfering with a student's academic performance, or District employee's work performance, or of creating an intimidating, hostile or offensive educational or work environment.
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. The instructor or Division 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 (10) days of instruction, for the remainder of the academic 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 (10) instructional days.

5. **Expulsion** - Is defined as the removal of a student from any and all classes of the college.
   1. Only the Board of Trustees 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 indefinite.
   3. The expulsion is noted in the permanent file of the student.
   4. Readmittance after expulsion requires 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 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.

3. **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) instructional days of the suspension if the suspension is an immediate suspension. An instructional 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 days and college holidays are excluded.
   2. Notice shall include date and place of hearing, a statement of all charges, a copy of applicable policies and procedures 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 or designee will make the final decision on the suspension.
   6. The decision of the President to suspend shall be given to the student in writing. The decision of the Board to impose expulsion shall be given to the student in writing within two (2) 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 in the Student Activities Office or by calling (562) 860-2451, Ext. 2471.

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 Faculty and Staff Diversity Officer at (562) 860-2451, Ext. 2284.

**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 2284.

**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 by 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 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 a resolution. 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 currently enrolled with a 2.0 G.P.A. 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, 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, Water Polo 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 students with a disability in campus programs and activities to the greatest extent feasible. The ability of each student with a disability 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 Dean of Disabled Student Programs and Services.

**DISABLED STUDENT PROGRAMS AND SERVICES**

Individuals with 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. The student with a disability seeking admission to Cerritos College must meet these levels of independence: (1) The ability to negotiate the campus facilities independently or with the assistance of an attendant; (2) The ability to take care of personal needs (feeding, toileting) unassisted or to provide one's own attendant; and, (3) The possession of a stable level of health to benefit from a full semester's work.

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://www.cerritos.edu/studentservices/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 information, referral for special instruction, wheelchair loan and storage, calculator and tape recorder loan, use of modified typewriters and specialized equipment, liaison with the Department of Rehabilitation and other agencies, information and referral to Counseling and Guidance and adaptive physical education classes.

**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. Braille 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 assistance in the basic 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 patients 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, please contact Student Health Services at (562) 860-2451, Ext. 2321.

HEALTH INSURANCE

Supplemental insurance is available on a voluntary basis for health and hospitalization coverage. Students must contact 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 information packets are also available through the SHS. We invite you to visit our website at www.cerritos.edu/health or call (562) 860-2451, Ext. 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 for short term therapy 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 ACTIVITY STICKER AND IDENTIFICATION CARD

A student activity sticker and identification 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 a.m. to 1 p.m. and 2 p.m. to 6 p.m., Monday through Thursday. Hours vary during summer sessions. Check the Student Activities website or call the Student I.D. Center.

Extended Hours

During the first week of classes in fall and spring semesters, the Student I.D. Center will be open on Fridays, 9 a.m. - 3 p.m.

If a student has special circumstances and cannot be available to obtain the student activity sticker and identification card during any of the hours listed above, arrangements can be made by calling (562) 860-2451, Ext. 2480. It is important that students be in possession of their Cerritos College identification card at all times while on the 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.

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 p.m., Monday through Thursday; 7:30 a.m. – 2 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 any time 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 used books not adopted for the next academic term or in excess of course requirements at published national market value.

The Bookstore will accept returns in accordance with the following policies:

1. Non-textbook items in resalable condition 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, including during summer term.
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 8 p.m.; the Cafeteria is open 11 a.m. to 1 p.m. for lunch Monday through Thursday during the fall and spring semesters. Vending machines are located throughout the campus.

CAREER SERVICES CENTER
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) Re-entry Resource Program
(5) Student Employment-Job Placement
(6) Transfer Center

The Career Services Center is located in the Administration Building.

Assessment Testing Center
The Assessment Testing Center administers tests for placement into reading, English, math, and ESL courses. The testing center is located in the Administration Building next to the Career Services Center. Please refer to the Matriculation section of this catalog for further information.

CalWORKs
The Cerritos College CalWORKs Program assists students who are receiving Temporary Assistance to Needy Families (TANF) and are enrolled in a county-approved program of study at Cerritos College. The program provides eligible students with counseling/case management services, educational and career planning, job search assistance, referrals to campus and community-based organizations, up-to-date information regarding welfare reform, advocacy with Department of Public Social Services, work-study opportunities and assistance with payment for childcare. For more information about the CalWORKs Program, please call (562) 860-2451, Ext. 2356, to make an appointment with a CalWORKs Counselor.

Career Planning
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 a.m. to 7 p.m.; and Friday, 8 a.m. to 4 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 a.m. to 7 p.m.; and Friday, 8 a.m. to 4 p.m. Call (562) 860-2451, Ext. 2362, for more information.

Student Employment-Job Placement Office
The Job Placement desk, located in the Career Services Center, provides job listings from local businesses, private industry and government agencies to Cerritos College students and alumni seeking employment. Full and part-time listings, as well as internship opportunities, are available for review in the office or can be accessed through the internet at www.monstertrak.com.

Job Placement is open Monday through Thursday, 8 a.m. to 7 p.m.; and Friday, 8 a.m. to 4 p.m. For more information call (562) 860-2451, Ext. 2356; email jobplacement-info@cerritos.edu; or visit www.cerritos.edu/career-services/job-placement.

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 the Career Services Center. Office hours are 8 a.m. to 7 p.m., Monday through Thursday; and 8 a.m. to 4 p.m. on Friday. Call (562) 860-2451, Ext. 2154, for further information or visit www.cerritos.edu/transfer.

CHILD DEVELOPMENT CENTER
A nationally accredited, state licensed Child Development Center is available for children, ages 2 years and 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 available, age of child, and readiness for group care. Students, staff and the community may use the Center. Physical examination and T.B. Test results must be available at time of enrollment and cannot be over one year old. Current, up-to-date immunization records must also be available. Students interested in these services should contact the Child Development Center at (562) 467-5051 or 860-2451, Ext. 2583.

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. Emancipated foster youth also have the opportunity to take classes to learn independent living skills.

There are three programs under the Foster and Kinship Care Education umbrella:

1) The Model Approach to Partnership in Parenting (MAPP) is a 33-hour training conducted for prospective foster parents, as 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) Youth Development Services (YDS), 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 the Cerritos College Campus. 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, 250 magazine and newspaper subscriptions in an open stack arrangement. The online catalog provides access to books, periodicals and reference databases; 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. Computers for student use are available in the library and two computer labs. Printers are also available.

Instructional Media Services, 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) also 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 (ASC) 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 students 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.

STUDENT RECORDS

Directory Information in Compliance with the Family Educational Rights and Privacy Act (FERPA)

Cerritos College will not release personal data about students without their prior written consent except to persons and agencies authorized by law. The college may make an exception to legitimate inquiries, by providing general directory information to include: name • major field of study • class level • dates of attendance • degrees and awards received • participation in officially recognized activities and sports • weight and height of members of athletic teams, and previous educational institutions attended.

Student Records 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 101-542 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.

ASSOCIATED STUDENTS AWARDS
The Associated Students offer 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
Clubs 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 Student Support Services and is located in the Administration building. Office hours are Monday through Thursday, 8 a.m. – 7 p.m., and Friday, from 8 a.m. – 4 p.m.

Financial aid applications are available year round. The Cerritos College Student Financial Aid Title IV Institutional Code is 001161. 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 may 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/financialaid](http://www.cerritos.edu/financialaid) 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. Students 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.

Academic Competitiveness Grant (ACG) is a federal program that is awarded to students who have completed a rigorous high school program of study. To be eligible, students must be (1) enrolled in the first or second academic year of an AA degree or transfer program, (2) enrolled full-time, (3) a U.S. Citizen, and (4) a Pell grant recipient. The ACG 1st year award is $750 ($375 per semester) and the ACG 2nd year award is $1,300 ($650 per semester). First year ACG recipients must have completed a rigorous secondary school program of study after January 1, 2006. Students must have a 3.0 GPA for the second year ACG and have completed a rigorous secondary school program of study after January 1, 2005. To apply, students must submit a Free Application for Federal Student Aid (FAFSA) and proof of completion of a rigorous program of study (high school transcripts, College Board results, and/or high school diploma with state seal).

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 $3,500 to $4,500 per academic year.

To be eligible for the $4,500 loan, 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.

**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:

\[
\text{Number of days completed} \div \text{Total number of days in the semester}
\]

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. Recipients 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 OVER-AWARDS

There are occasions when students receive financial aid payments based upon misreported information. This results in a grant over-award. 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 $1,251 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, fees, 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 Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI) or General Relief. Documentation is required; or
2. Student must meet income standards based on family size. Documentation is required; or
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 cms.cerritos.edu/financial-aid/programs/scholarship.

OFFICE OF VETERANS AFFAIRS

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

Staff is available to provide help with processing applications and to do check inquiries to the Veterans Administration. Veterans must maintain 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 veterans academic counselor.

Please go to the Veterans Affairs website at www.cerritos.edu/veterans/vet-hours.html to view the service hours. Service hours vary each semester. You may also call (562) 860-2451, Ext. 2120, for information. The Veterans Affairs Office is located within the Admissions and Records Office 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.

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, P, NP, 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 if additional information or clarification is desired.

ADDITIONAL ASSOCIATE IN ARTS DEGREES

Once an AA degree has been obtained, an additional AA degree may be 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 AA 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 AA degree were met in the first AA 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 AA.
4. Additional AA degrees may be granted for each eighteen (18) degree applicable additional units completed. For example a third AA 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 AA degree.

COMMENCEMENT

Commencement exercises are held once a year at the end of the spring semester for all students-for those who were 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.
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 AA 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 AA 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 for General Education 2008-09

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 AA 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:
      Dance 105, 106A, 106B, 107, 108A, 108B, 109, 110, 120, 121, 125, 130, 133, 134, 135, 136, or
   b. Completion of HED 100, 101, 103, or 200; TH 140-143; MUS 160-164; HO 100, 151 or 152; CDEC 161; PE 100; or WS 103.
   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), 112 (lab)
         Earth Science 101, 102 (lab), 104, 104L (lab), 106, 110 (lab)
         Energy 110
         Geography 101, 101L (lab), 103
         Geology 101 (LAB), 201 (lab), 204, 207 (lab), 208, 209
         Physical Science 100, 112 (lab)
         Physics **50 (lab), 100 (lab), 101 (lab), 102 (lab), 201 (lab), 202 (lab), 203 (lab)
      (2) Biological Sciences
         Anatomy and Physiology 120 (lab), 130 (lab), 150 (lab), 151 (lab), 200 (lab), 201 (lab)
         Anthropology **110, 115, 115L (lab)
         Biology 105, 110 (lab), 115 (lab), 120 (lab), 200 (lab), 201 (lab)
         Botany 120 (lab)
         Microbiology 200 (lab)
         Psychology 241
         Zoology 120 (lab)

   b. SOCIAL AND BEHAVIORAL SCIENCES: 3 UNITS MINIMUM
      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 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.
      (2) Political Science 101 or 201
         (This requirement can be met by successfully passing 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.)
      (3) Social and Behavioral Sciences
         Administration of Justice 101
         Anthropology 100, 120, 170, 200, 201, 202, 203, 205
         Business Finance 125
         Child Development 110
         Child Development/Early Childhood *113
         Counseling and Guidance **150, 200
         Economics 101, 102, 201, 202, 204
         Environmental Policy 200
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
Dance 100, 101
Humanities: *108, *109
Music 100, 101, 102, 103, 104, 104B, 105
Photography 100, 160
Theatre 101, 102, 103, 104, **110, 150, RTV151/TH 151, RTV 152, TH 159

(2) HUMANITIES
Art *108, *109
Chinese 101
French 101, 102, 201, 202, 203
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, 190, 220, 240
Philosophy 103, 106

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 2008-09 school year and thereafter. Students who enrolled prior to Fall 2008 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.
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 AA 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.

**CALIFORNIA 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 101, 103, Philosophy 103, 106, Psychology 103, Reading 200, 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), 112 (lab)
   - Earth Science 101, 102 (lab), 104, 104L (lab), 106, 110 (lab)
   - Energy 110
   - Geography 101, 101L (lab), 103
   - Geology 101 (lab), 201 (lab), 204, 207 (lab), 208, 209
   - Physical Science 100, 112 (not considered a LAB science for CSU GE)
   - Physics 100 (lab), 101 (lab), 102 (lab), 201 (lab), 202 (lab), 203 (lab)

2. Biological Sciences
   - Anatomy and Physiology 120 (lab), 130 (lab), 150 (lab), 151 (lab), 200 (lab), 201 (lab)
   - Anthropology 115, 115L (lab)
   - Biology 105, 110 (lab), 115 (lab), 120 (lab), 200 (lab), 201 (lab), 202
   - Botany 120 (lab)
   - Microbiology 200 (lab)
   - Psychology 241
   - Zoology 120 (lab)

3. Mathematical Concepts
   - 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.

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

2. Humanities
   - Art *108, *109
   - Chinese 101
   - French 101, 102, 201, 202, 203
   - German 101, 102, 201, 202
   - Japanese 101, 102, 201, 202
   - Philosophy 100, 102, 104, 200, 201, 204, 206
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, 200, 201, 202, 203, *205
      Child Development *110
      Economics 101, 102, 201, 202, 204
      Geography 102, 105
      Journalism 100
      Physical Education *106
      Political Science 110, 210, 220, 230, 260
      Psychology 101, *150, 251, 261, 265, 271
      Sociology 101, *110, *120, 201, 202, 210, 215, 230, 250
      Speech 110
      Women's Studies 101, *106, 202, 204, *205, 206

E. Self-Development: 3 units minimum.
   Take one course from the following:
   Anthropology *205
   Business Finance 125
   Child Development *110
   Counseling and Guidance 200
   Health Education 100, 101
   Health Occupations 152
   Physical Education *106, 141
   Psychology *150
   Sociology *110, *120
   Women's Studies *106, *205

* 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, 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.

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.
Associate in Arts Degree for General Education  
2008-09 
Plan C 
Intersegmental General Education Transfer Curriculum (IGETC) 
For Transfer to UC and CSU 

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 AA 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 101, 103 
Philosophy 103 
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+ 
Dance 100, 101 
Humanities *108, *109 
Music 100, 101, 103, 104, 104B, 105 
Photography 160 
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, 205, 210, 245 
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, 201, 202, 203, 205 
Child Development 110 
Economics 101+, 102, 201, 202 
Geography 102, 105 
Political Science 101+, 201+, 210, 220, 230 
Psychology 101, 150, 251, 261, 271 
Sociology 101, 110, 120, 201, 202, 210, 215, 250 
Speech 110 
Women’s Studies 101, 106, 202, 204, 205, 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, 102 (lab), 104, 104L (lab), 106, 110+ (lab)
Geography 101, 101L (lab), 103
Geology 101+ (lab), 201 (lab), 207 (lab), 208, 209
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, 115L (lab)
Biology 115 (lab), 120+ (lab), 200 (lab), 201 (lab), 202
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 be used to satisfy requirements for the IGETC, at the discretion of the receiving CSU campus. 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 nationally, we are continuing our efforts to obtain articulation agreements for transferring to Historically Black Colleges and Universities (HBCUs). To assure that appropriate transfer course work is being undertaken at Cerritos College, students should plan to communicate regularly with a counselor.

THE CALIFORNIA STATE UNIVERSITY

TRANSFER REQUIREMENTS

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 general education semester (45 quarter) units (Plan B/Plan C) must include ENGL 100, oral communication, critical thinking, and transferable mathematics with a minimum prerequisite of intermediate algebra.

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:

The College Board (SAT)  American College Testing Program (ACT)
Registration Unit, Box 592  Registration Unit, P.O. Box 168
Princeton, New Jersey 08541  Iowa City, Iowa 52240

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.

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.
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 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 101, 103, Philosophy 103, 106, Psychology 103, Reading 200, 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), 112 (LAB)
      Earth Science 101, 102 (LAB), 104, 104L (LAB) 106, 110 (LAB)
      Energy 110
      Geography 101, 101L (LAB), 103
      Geology 101 (LAB), 201 (LAB), 204, 207 (LAB), 208, 209
      Physical Science 100, 112 (not considered a LAB science for CSU GE)
      Physics 100 (LAB), 101 (LAB), 102 (LAB), 201 (LAB), 202 (LAB), 203 (LAB)

   2. BIOLOGICAL SCIENCES
      Anatomy and Physiology 120 (LAB), 130 (LAB), 150 (LAB), 151 (LAB), 200 (LAB), 201 (LAB)
      Anthropology 115, 115L (LAB)
      Biology 105, 110 (LAB), 115 (LAB), 120 (LAB), 200 (LAB), 201 (LAB), 202 (LAB)
      Botany 120 (LAB)
      Microbiology 200 (LAB)
      Psychology 241
      Zoology 120 (LAB)

   3. MATHEMATICAL CONCEPTS
      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
      Dance 100, 101
      Humanities *108, *109
      Music 100, 101, 102, 103, 104, 104B, 105
      Photography 100, 160
      Theatre 101, 102, 103, 104, 150, RTV 151/TH 151, RTV 152, TH 159

   2. HUMANITIES
      Art *108, *109
      Chinese 101
      French 101, 102, 201, 202, 203
      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, 205, 206, 210, 245
      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, 120, 170, 200, 201, 202, 203, *205
      Child Development *110
      Economics 101, 102, 201, 202, 204
      Geography 102, 105
      Journalism 100
      Physical Education *106
      Political Science 110, 210, 220, 230, 260
      Psychology 101, *150, 251, 261, 271
      Sociology 101, *110, *120, 201, 202, 210, 215, 230, 250
      Speech 110
      Women's Studies 101, *106, 202, 204, *205, 206
E. SELF-DEVELOPMENT: 3 units minimum.
   Choose one course from the following:
   Anthropology *205
   Business Finance 125
   Child Development *110
   Counseling and Guidance 200
   Health Education 100, 101
   Health Occupations 152
   Physical Education *106, 141
   Psychology *150
   Sociology *110, *120
   Women's Studies *106, *205

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

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 in the Administration building.

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 UC transferable college coursework. If you completed less than 18 quarter or 12 semester units of UC 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 UC 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.

*Please also refer to the section titled "Intersegmental General Education Transfer Curriculum."

*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 UC 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 2008-09 school year.
INTERSEGMENTAL 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 division 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. 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 101, 103
   Philosophy 103
   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+
   Dance 100, 101
   Humanities *108, *109
   Music 100, 101, 103, 104, 104B, 105
   Photography 160
   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, 205, 210, 245
   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, 201, 202, 203, 205
   Child Development 110
   Economics 101+, 102, 201, 202
   Geography 102, 105
   Physical Education 106
   Political Science 101+, 201+, 210, 220, 230
   Psychology 101, 150, 251, 261, 271
   Sociology 101, 110, 120, 201, 202, 210, 215, 250
   Speech 110
   Women’s Studies 101, 106, 202, 204, 205, 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, 102 (lab), 104, 104L (lab), 106, 110+ (lab)
   Geography 101, 101L (lab), 103
   Geology 101+ (lab), 201 (lab), 207 (lab), 208, 209
   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, 115L (lab)
   Biology 115 (lab), 120+ (lab), 200 (lab), 201 (lab), 202
   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 be used to satisfy requirements for the IGETC at the discretion of the receiving CSU campus. 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

WHAT IS WEEKEND COLLEGE?

Weekend College enables working adults to succeed as students while meeting family and personal obligations. Students can take a full-time load of four courses, twelve units per semester, by attending classes on Friday nights and all day Saturday. Distance Learning is a component of the program. Weekend College is a complete college experience based on a traditional curriculum whose content has been refashioned to fit the needs and schedules of today’s working adults. It is designed for both, part-time or full-time students, and for those who bring transfer credits from other colleges as well as students who are just beginning their college education.

HOW CAN WEEKEND COLLEGE HELP YOU?

• Earn general education credits to transfer
• Explore exciting career paths
• Brush up on your job skills
• Complete your college degree faster
• Complete the program in a supportive environment
• Envision your personal and professional success
• Make earning your B.A. degree a reality

HOW THE PROGRAM WORKS?

1. Apply to Cerritos Community College at: www.cccapply.org/applications/CCCApply/apply/Cerritos_College.html
2. Attend a Weekend College Orientation. Information available at: www.cerritos.edu/weekendcollege
3. Apply to Weekend College Program at: http://cms.cerritos.edu/scripts/weekendcollege/wc_application.asp
5. Obtain and submit official transcripts of all previous college course work completed at all institutions of higher learning.
Community, Industry & Technology Education — Bringing it all together for Business!

OFFICE OF ECONOMIC DEVELOPMENT

The Office of Economic Development (OED) has been established by Cerritos 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, Ext. 2511.

COMMUNITY EDUCATION

The Community Education programs carries 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.

SEMINARS FOR PROFESSIONALS/CERTIFICATE OF COMPLETION:


For specific information regarding these programs, call Community Education (562) 467-5050, Ext. 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
- Vocational English as a Second Language
- Pre-apprenticeship/Apprenticeship
- Elementary and Secondary Basic Skills
- Courses for Immigrants
- CAHSEE Prep
- Short-term Vocational Programs
- Educational Programs for Older Adults
- Older Wiser Learner (OWL)

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. 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, check the schedule of classes.

REGISTRATION FOR COMMUNITY EDUCATION 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.
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 website 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.

(L) Dr. Eric Ikeda, Foundation board director and Bellflower optometrist; Amber Salcedo, winner of the Bellflower Noon Lions Club Scholarship; and Dr. Ted Edmiston, Cerritos College trustee.
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.

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) AA degree general education requirements, and (3) additional elective courses as needed.

ADMINISTRATION OF JUSTICE CORE
REQUISITED (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>
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</tbody>
</table>

DEPARTMENT REQUIREMENTS
REQUISITED (12 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AJ 110</td>
<td>Patrol Procedures and Enforcement Tactics</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>
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ELECTIVE GROUP

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AJ 51</td>
<td>Firearms</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 107</td>
<td>Introduction to Probation and Parole</td>
<td>3</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></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>
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<tr>
<td>AJ 299</td>
<td>Directed Studies</td>
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<tr>
<td>BCOT 131</td>
<td>Beginning College Keyboarding &amp; Document Processing (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 DIVISON MAJOR REQUIREMENTS
FOR SPECIFIC TRANSFER INSTITUTIONS

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

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

There is one required core course that is not currently offered at Cerritos College.

Six cognate courses (18 units) in related disciplines are also required. Transfer students are encouraged to complete as many of the cognate courses as they can. At Cerritos, 12 of those 18 units can be completed. They are PSYC 101, SOC 101, POL 101 and PHIL 106.

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 www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

California State University-Long Beach
AJ 101 Introduction to Administration of Justice 3
AJ 102 Concepts of Criminal Law 3
and
AJ 202 Substantive Law 3
or
BL 116 Criminal Law (3)
AJ 150 Introduction to Corrections 3

Students transferring to CSULA 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

Recommended electives for any of the above universities, for this major are:
AJ 102 Introduction to Administration of Justice 3
AJ 103 Criminal Procedure 3
AJ 104 Criminal Evidence 3
AJ 105 Community Relations 3
AJ 202 Substantive Law 3
PSYC 101 General Introductory Psychology 3
SOC 101 Introductory Sociology Principles 3

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 AA degree in Administration of Justice.

CAREER OPPORTUNITIES: For those persons seeking employment in law enforcement at the AA 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.)

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

AGRICULTURE
TRANSFER PROGRAM

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC INSTITUTIONS

California State University - Chico
Bachelor of Science in Agriculture option in Crops, Horticulture, Land Resource Management.

UNITS
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5
or
CHEM 211 Organic Chemistry 5
MATH 112 Elementary Statistics 4

California State Universities and Colleges that offer related 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 MAJOR PREPARATION FOR CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ANTH 100 Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 115 Physical Anthropology</td>
<td>3</td>
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</tbody>
</table>

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University-Dominguez Hills

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 120 Introduction to Archaeology</td>
<td>3</td>
</tr>
</tbody>
</table>

California State University – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 103 Critical and Argumentative Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ANTH 120 Introduction to Archaeology</td>
<td>3</td>
</tr>
</tbody>
</table>

A modern foreign language with at least 2nd year proficiency (101 and 102 or 111 and 112 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 fulfillment of the requirements below, a single course may be used only once.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 115 Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 120 Introduction to Archeology</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 170 Introduction to Language and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

Four Additional Anthropology Courses from the courses listed below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 115 Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 120 Introduction to Archeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 200 Native Peoples of North America</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 201 Native Peoples of California</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 202 The Maya, Inca and Aztecs: Ancient Civilizations of the Americas</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 203 The Anthropology of Magic, Witchcraft, and Religion</td>
<td>3</td>
</tr>
<tr>
<td>CIS 101 Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 101 Introduction to Computer Information Systems</td>
<td>(3)</td>
</tr>
<tr>
<td>and CIS 103 Computer Programming Logic</td>
<td>(3.5)</td>
</tr>
<tr>
<td>or CIS 280 Object-Oriented Programming in C++</td>
<td>(3)</td>
</tr>
<tr>
<td>and CIS 182 JAVA Programming</td>
<td>(3.5)</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>and PSYCH 210 Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 112 Elementary Statistics</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Select any additional Anthropology courses as electives for a total of 18 units.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 200 Native peoples of North America</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 201 Native peoples of California</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 202 The Maya, Inca &amp; Aztecs: Ancient Civilization of the Americas</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 203 The Anthropology of Music, Witchcraft and Religion</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 204 The Anthropology of Sexuality and Gender</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 250 Introduction to field Archaeology</td>
<td>3</td>
</tr>
</tbody>
</table>

CAREER OPPORTUNITIES: Employment for the person holding a 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. will find limited employment. 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 110 Introduction to Architecture and Environmental Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 111 Architectural Drafting and Design I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 112 History of Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 113 Building Codes</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 121 Architectural Drafting and Design II</td>
<td>3</td>
</tr>
</tbody>
</table>
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 AA Degree general education requirements, and (3) electives as needed.

RECOMMENDED ELECTIVES: ART 185, BA 100, ENGT 255, PSYC 101, RE 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
or ECON 202 Principles of Microeconomics (3)
ENGL 102 Composition and Literature 3
or ENGL 103 Critical and Argumentative Writing (3)
MATH 140 Trigonometry 3

ADDITIONAL LOWER DIVISION REQUIREMENTS 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 Design, Programming and Presentation 3
ARCH 212 Architectural Design Theory I 3
ARCH 222 Architectural Design Theory II 3
PHYS 101 General Physics 4

NOTE: Applications are only accepted from October 1 – November 30 for the following academic year: Fall applications only. The Golden “4” must be completed by end of Fall semester in which the student applies to the program (e.g.) by end of Fall – 08 for entrance in Fall – 09.

California State Polytechnic University – San Luis Obispo
ARCH 110 Introduction to Architecture and Environmental Design 3
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 101 General Physics 4
PHYS 102 General Physics 4
or PHYS 201 Engineering Physics (4)
PHYS 202 Engineering Physics (4)

University of California – Berkeley
ARCH 110 Introduction to Architecture and Environmental Design 3
ARCH 112 History of Architecture 3
ARCH 122 Architectural Delineation 2
ARCH 212 Architectural Design Theory I 3
ART 110 Freehand Drawing 3
ART 121 Three-Dimension Design 3
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 201 Engineering Physics 4

University of Southern California
ARCH 112 History of Architecture 3
ARCH 122 Architectural Delineation 2
ARCH 212 Architectural Design Theory I 3
MATH 150 PreCalculus Mathematics 4
PHYS 101 General Physics 4

Recommended Electives:
ART 110, 120, 121
ARCH 121, 123, 211, 213, 222

Woodbury University
ARCH 122 Architectural Delineation 2
ARCH 212 Architectural Design Theory I 3
ARCH 222 Architectural Design Theory II 3
ARCH 123 Introduction to 2-D Computer Aided Drafting 4
ARCH 213 Introduction to 3-D Computer Aided Drafting 4
ARCH 121 Architectural Drafting & Design II 3
ARCH 113 Building Codes 4
ARCH 112 History of Architecture 3
SPCH 100 Fundamentals of Oral Communication 3
or SPCH 130 Fundamentals of Speaking (3)
ART 103 Modern and Contemporary Appreciation 3
MATH 114 College Algebra (Not necessary if Pre-Calculus or Calculus have been completed) 4
PHYS 101 General Physics 4
PHYS 102 General 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.


See counseling for information.
OCCUPATIONAL PREPAREDNESS IN DESKTOP PUBLISHING/JOURNALISM

VERIFICATION OF COMPLETION

This verification will provide the student with the entry-level skills needed to write and prepare for printing such widely produced documents and newsletters, brochures, and news releases. These skills are applicable in a wide variety of business environments.

FINE ART DESKTOP PUBLISHING/JOURNALISM

VERIFICATION OF COMPLETION 14-15 UNITS

SELECT 11-12 UNITS FROM THE FOLLOWING:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 186</td>
<td>Computer Graphics with Adobe Illustrator</td>
<td>3</td>
</tr>
<tr>
<td>ART 188</td>
<td>Design for Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>ART 192</td>
<td>Photoshop/Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 101</td>
<td>Beginning Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 105</td>
<td>Newspaper Production</td>
<td>2</td>
</tr>
</tbody>
</table>

PLUS ONE COURSE FROM THE FOLLOWING:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 182A</td>
<td>Lettering and Typography</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 103</td>
<td>Newspaper Article Writing</td>
<td>2</td>
</tr>
<tr>
<td>JOUR 157</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>PHOT/JOUR 130</td>
<td>Photojournalism</td>
<td>3</td>
</tr>
</tbody>
</table>

ART AND DESIGN

LETTERING ARTS

VERIFICATION OF COMPLETION

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 180</td>
<td>Calligraphy I – Basic Roman Letterforms</td>
<td>3</td>
</tr>
<tr>
<td>ART 181</td>
<td>Calligraphy II - Basic Italic Letterforms</td>
<td>3</td>
</tr>
<tr>
<td>ART 287A</td>
<td>Letter Arts I - Uncial and Gothic Letterforms</td>
<td>2</td>
</tr>
<tr>
<td>ART 287B</td>
<td>Roman Calligraphy</td>
<td>2</td>
</tr>
<tr>
<td>ART 183A</td>
<td>Commercial Brush Lettering</td>
<td>1</td>
</tr>
<tr>
<td>ART 183B</td>
<td>Copperplate Calligraphy</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL VERIFICATION REQUIREMENTS 12

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

The Lettering Arts Verification 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 Verification of Completion in the Lettering Arts Certificate will be granted upon completion of 12 units.

ART AND DESIGN ASSOCIATE IN ARTS DEGREE

REQUIRED FOUNDATIONAL COURSES (15 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 102</td>
<td>Art History II: Renaissance to Rococo</td>
<td>3</td>
</tr>
<tr>
<td>or ART 103</td>
<td>Art History III: Neoclassical to Present</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 110</td>
<td>Freehand Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Two-Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 121</td>
<td>Three-Dimensional Design</td>
<td>3</td>
</tr>
</tbody>
</table>

ART AND DESIGN OPTIONAL TRACKS (CHOOSE ONE)

CERAMICS — REQUIRED (6 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 150</td>
<td>Introduction to Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ART 151</td>
<td>Ceramics – Wheelthrowing</td>
<td>3</td>
</tr>
</tbody>
</table>

JEWELRY — REQUIRED (12 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 144</td>
<td>Jewelry/Metalsmithing</td>
<td>3</td>
</tr>
<tr>
<td>ART 145</td>
<td>Jewelry Casting and Molds</td>
<td>3</td>
</tr>
<tr>
<td>ART 246</td>
<td>Jewelry Design Fabrication</td>
<td>3</td>
</tr>
</tbody>
</table>

DRAWING AND PAINTING — REQUIRED (9 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 130A</td>
<td>Fundamentals of Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 130B</td>
<td>Fundamentals of Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 136</td>
<td>Painting for Art Majors</td>
<td>3</td>
</tr>
</tbody>
</table>

PRINTMAKING — REQUIRED (9 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 116</td>
<td>Beginning Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 117</td>
<td>Intermediate Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 218</td>
<td>Screenprinting</td>
<td>3</td>
</tr>
<tr>
<td>or ART 219</td>
<td>Advanced Etching</td>
<td>(3)</td>
</tr>
</tbody>
</table>

SCULPTURE — REQUIRED (11 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 160</td>
<td>Life Sculpture</td>
<td>2</td>
</tr>
<tr>
<td>ART 162</td>
<td>Introduction to Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 163</td>
<td>The Techniques of Sculpture</td>
<td>3</td>
</tr>
<tr>
<td>ART 264</td>
<td>Sculpture-Stonecarving</td>
<td>3</td>
</tr>
</tbody>
</table>

GRAPHIC DESIGN — REQUIRED (18 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 182A</td>
<td>Lettering and Typography</td>
<td>3</td>
</tr>
<tr>
<td>ART 184</td>
<td>Graphic Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART 186</td>
<td>Computer Graphics with Adobe Illustrator</td>
<td>3</td>
</tr>
<tr>
<td>ART 188</td>
<td>Design for Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>ART 192</td>
<td>Photoshop/Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>ART 196</td>
<td>Web Design with Flash &amp; Dreamweaver</td>
<td>3</td>
</tr>
</tbody>
</table>

RECOMMENDED ELECTIVES

CERAMICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 252</td>
<td>Ceramics – Form and Technique</td>
<td>3</td>
</tr>
<tr>
<td>ART 253</td>
<td>Ceramics – Form and Content</td>
<td>3</td>
</tr>
</tbody>
</table>

DRAWING AND PAINTING

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 213</td>
<td>Intermediate Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 237</td>
<td>Life Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART 238</td>
<td>Special Studies in Painting</td>
<td>3</td>
</tr>
</tbody>
</table>
## Graphic Design

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 180</td>
<td>Calligraphy I</td>
<td>3</td>
</tr>
<tr>
<td>ART 181</td>
<td>Calligraphy II</td>
<td>3</td>
</tr>
<tr>
<td>ART 182B</td>
<td>Lettering and Typography II</td>
<td>3</td>
</tr>
<tr>
<td>ART 185</td>
<td>Rendering I</td>
<td>3</td>
</tr>
<tr>
<td>ART 285</td>
<td>Rendering II</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 100</td>
<td>Introductory Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

### Multimedia Design

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 100</td>
<td>Introductory Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 102</td>
<td>Intermediate Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 112</td>
<td>Intermediate Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 184</td>
<td>Graphic Design I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 205</td>
<td>Programming in HTML for the World Wide Web</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### Printmaking

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 218</td>
<td>Screenprinting</td>
<td>3</td>
</tr>
<tr>
<td>ART 219</td>
<td>Advanced Etching</td>
<td>3</td>
</tr>
</tbody>
</table>

### 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; sketch, private studio; desktop publisher; graphic designer; Web Designer; computer illustrator; gallery museum worker; art supplies sales.

See Cerritos College Graduation Requirements.

## Computer Animation

### Certificate of Achievement

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Art History I: Prehistory to Gothic</td>
<td>3</td>
</tr>
<tr>
<td>or ART 103</td>
<td>Art History III: Neoclassical to Present</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 110</td>
<td>Freehand Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 114</td>
<td>Storyboard and Graphic Novel Illustration</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Two Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 121</td>
<td>Three Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 190</td>
<td>Animation Principles</td>
<td>3</td>
</tr>
<tr>
<td>ART 191</td>
<td>3D Character Animation</td>
<td>3</td>
</tr>
<tr>
<td>ART 195</td>
<td>3D Computer Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 240</td>
<td>Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>MUS 244</td>
<td>Digital Audio Production</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Certificate Requirement:** 33

### Associate in Arts Degree Requirements:

Complete the requirements for a Certificate of Achievement in Computer Animation. For an AA Degree, a student must also take 6 units from the following courses: ART 192, ART 194, ART 196, TH 156 and general education requirements to achieve a minimum of 60 units.

## Motion Graphics

### Certificate of Achievement

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Art History I: Prehistory to Gothic</td>
<td>3</td>
</tr>
<tr>
<td>or ART 103</td>
<td>Art History III: Neoclassical to Present</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 110</td>
<td>Freehand Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 114</td>
<td>Storyboard and Graphic Novel Illustration</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Two Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 121</td>
<td>Three Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 190</td>
<td>Animation Principles</td>
<td>3</td>
</tr>
<tr>
<td>ART 198</td>
<td>Motion Graphics</td>
<td>3</td>
</tr>
<tr>
<td>MUS 244</td>
<td>Digital Audio Production</td>
<td>3</td>
</tr>
</tbody>
</table>

### Required Courses

**Total Certificate Requirement:** 33

**Associate in Arts Degree Requirements:**

Complete requirements for a Certificate of Achievement in Motion Graphics. For an AA Degree, a student must also take 6 units 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)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Art History I: Prehistory to Gothic</td>
<td>3</td>
</tr>
<tr>
<td>or ART 103</td>
<td>Art History III: Neoclassical to Present</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 110</td>
<td>Freehand Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Life Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 114</td>
<td>Storyboard and Graphic Novel Illustration</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Two Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 121</td>
<td>Three Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 190</td>
<td>Animation Principles</td>
<td>3</td>
</tr>
<tr>
<td>ART 191</td>
<td>3D Character Animation</td>
<td>3</td>
</tr>
<tr>
<td>ART 195</td>
<td>3D Computer Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 240</td>
<td>Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>MUS 244</td>
<td>Digital Audio Production</td>
<td>3</td>
</tr>
</tbody>
</table>

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

### Motion Graphic Emphasis

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 182A</td>
<td>Lettering and Typography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 182B</td>
<td>Lettering and Typography II</td>
<td>3</td>
</tr>
<tr>
<td>ART 198</td>
<td>Motion Graphics</td>
<td>3</td>
</tr>
<tr>
<td>MUS 244</td>
<td>Digital Audio Production</td>
<td>3</td>
</tr>
</tbody>
</table>

### Computer Animation Emphasis

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 240</td>
<td>Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>ART 191</td>
<td>3D Character Animation</td>
<td>3</td>
</tr>
<tr>
<td>ART 195</td>
<td>3D Computer Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MUS 244</td>
<td>Digital Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>or ART 193</td>
<td>Motion Picture Editing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus two courses from the following list (6 units):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 156</td>
<td>Video Production</td>
<td>3</td>
</tr>
<tr>
<td>ART 192</td>
<td>Photoshop/Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>ART 194</td>
<td>Multimedia Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 196</td>
<td>Web Design with Flash and Dreamweaver</td>
<td>3</td>
</tr>
</tbody>
</table>
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 VERIFICATION OF COMPLETION

REQUIRED COURSES   UNITS
ART 186    Computer Graphics with Adobe Illustrator  3
ART 188    Design for Desktop Publishing  3

TOTAL VERIFICATION OF COMPLETION REQUIREMENTS  6

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

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

3D ANIMATION FOUNDATION VERIFICATION OF COMPLETION

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

TOTAL VERIFICATION OF COMPLETION REQUIREMENTS  6

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

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

DIGITAL GRAPHICS FOUNDATION VERIFICATION OF COMPLETION

REQUIRED COURSES   UNITS
ART 186    Computer Graphics with Adobe Illustrator  3
ART 192    Photoshop/Digital Imaging  3

TOTAL VERIFICATION OF COMPLETION REQUIREMENTS  6

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

The Digital Graphics Foundation Verification 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 Verification 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 TRANSFER INSTITUTIONS

California State University — Dominguez Hills

ART 101 Art History I: Prehistory to Gothic  3
ART 102 Art History II: Renaissance to Rococo  3
and ART 103 Art History III: Neoclassical to Present  3
ART 120 Two-Dimensional Design  3
ART 121 Three-Dimensional Design  3

The above courses are common core requirements only. See a counselor for additional major requirements for specific Art options.

AVAILABLE OPTIONS: ART HISTORY, DESIGN, AND STUDIO ART.

California State University — Fullerton

ART 101 Art History I: Prehistory to Gothic  3
ART 102 Art History II: Renaissance to Rococo  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

The above requirements are core requirements only. 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.

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.
California State University – Long Beach

ART 101 Art History I: Prehistory to Gothic 3
ART 102 Art History II: Renaissance to Rococo 3
ART 110 Freehand Drawing 3
ART 112* Life Drawing 3
ART 120 Two-Dimensional Design 3
ART 121 Three-Dimensional Design 3
ART 130A+ Fundamentals of Painting 3
or ART 130B+ Fundamentals of Painting (3)
or ART 136+ Painting for Art Majors (3)

* This course can be substituted with Art 160 for 3-D media, Art Photography, and Ceramics

+ These courses are not required for the Art Photography option; take Phot 100 and art 186 instead.

The above requirements are common for most art options. See a counselor for exceptions and additional major requirements for specific Art options.

Available Options: Art History; Art Education (single subject instruction); Art Photography; Ceramics; Drawing and Painting; Illustration; 3-D Media; Printmaking; Sculpture, Studio Art, Graphic Design, Interior and Industrial design (note: major requirements are different from above. Please see a counselor for more information). 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 Art History I: Prehistory to Gothic 3
and ART 102 Art History II: Renaissance to Rococo 3
ART 110 Freehand Drawing 3
ART 120 Two-Dimensional Design 3
ART 121 Three-Dimensional Design 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 the prerequisite for their writing proficiency requirement.

University of California – Irvine

Two courses from:
ART 101 Art History I: Prehistory to Gothic 3
ART 102 Art History II: Renaissance to Rococo 3
ART 103 Art History III: Neoclassical to Present 3
ART 107 Asian Art History 3

Plus, four (4) courses in different media selected from:
ART 110 Freehand Drawing 3
or ART 111 Intermediate Freehand Drawing (3)
or ART 130A Fundamentals of Painting 3
or ART 130B Fundamentals of Painting (3)
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)
PHOT 100 Introductory Photography 3

University of California – Los Angeles

Specific articulation for the major preparation is not available. The following are recommended preparation courses for the major. Exemptions from lower division requirements will be determined by the department after admissions.

ART 103 Art History III: Neoclassical to Present 3
ART 110 Freehand Drawing 3
ART 130A Fundamentals of Painting 3
ART 150 Introduction to Ceramics 3
ART 162 Introduction to Sculpture 3
PHOT 100 Introductory Photography 3

Plus, courses selected from:

ART 101 Art History I: Prehistory to Gothic 3
ART 102 Art History II: Renaissance to Rococo (3)
ART 100 Introduction to World Art (3)

NOTE: supplemental application, statement of interest and goals (in addition to the general UC Application Personal Statement), and portfolio (of five slides) are required for admissions. Portfolio must be submitted in digital (CD-R) format.

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

Plus, one (1) course selected from:

ART 101 Art History I: Prehistory to Gothic 3
or ART 102 Art History II: Renaissance to Rococo (3)
and ART 103 Art History III: Neoclassical to Present (3)

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.
GENERAL AUTOMOTIVE COLLISION REPAIR (AUTOBODY TECHNICIAN)

**CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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>AB 52</td>
<td>Structural Damage Repair</td>
<td>4.5</td>
</tr>
<tr>
<td>AB 53</td>
<td>Suspension, Alignment and 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 61</td>
<td>Preparation and Spot Refinishing</td>
<td>4.5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENT**  27

CAREER OPPORTUNITIES: This program prepares students with entry-level knowledge and skills in automotive collision repair, including body and frame repair technician, assistant 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.

RECOMMENDED ELECTIVES: AB 56, AB 57, AB 58, AB 59A, AB 59B, AB 59C, AB 59E, AB 62, AB 63, AB 65, AB 66, AB 73, AB 75, AB 76, AB 77, AB 79, AB 80, AB 83A, AB 83C, AB 83M, AB 86, AB 88, AB 181, AB 182, AB 183, AB 281, AB 282, AB 283, AB 285, AB 287, AB 288.

AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY

**CERTIFICATES OF ACHIEVEMENT**

**AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY-GENERAL TECHNICIAN**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 110</td>
<td>Engines</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 120</td>
<td>Automatic Transmissions/Transaxles</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 130</td>
<td>Manual Drivetrain and Axles</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 140</td>
<td>Automotive Steering and Suspension</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 150</td>
<td>Automotive Brakes</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 160</td>
<td>Electrical</td>
<td>5</td>
</tr>
</tbody>
</table>

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**AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY ELECTRICAL/DIAGNOSIS TECHNICIAN**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 110</td>
<td>Engines</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 160</td>
<td>Electrical</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 170</td>
<td>Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 180</td>
<td>Electronic Engine Management Systems</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 260</td>
<td>Advanced Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 280</td>
<td>Diagnostic Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 281</td>
<td>Emission Control</td>
<td>5</td>
</tr>
</tbody>
</table>

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**AUTOMOTIVE MECHANICAL REPAIR ENGINE/MACHINING TECHNOLOGY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Maintenance</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 110</td>
<td>Engines</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 210</td>
<td>Automotive Machine Shop</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 211</td>
<td>Advanced Engines</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 212</td>
<td>Automotive Specialty</td>
<td>2</td>
</tr>
</tbody>
</table>

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**AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY MANUFACTURE SPECIALTY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 73</td>
<td>Work Experience</td>
<td>15</td>
</tr>
<tr>
<td>AUTO 111</td>
<td>Engines</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 121</td>
<td>Drivetrain Transmissions and Axles</td>
<td>6</td>
</tr>
<tr>
<td>AUTO 151</td>
<td>Brake and Alignment</td>
<td>6</td>
</tr>
<tr>
<td>AUTO 161</td>
<td>Electrical</td>
<td>7</td>
</tr>
<tr>
<td>AUTO 179</td>
<td>Automotive Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 181</td>
<td>Electronic Engine Management Systems – Corporate</td>
<td>6</td>
</tr>
</tbody>
</table>

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**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 or TM 50 and 3) electives as needed.

RECOMMENDED ELECTIVES: WELD 100, 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.

**AUTOMOTIVE MECHANICAL REPAIR – INSTALLER VERIFICATION OF COMPLETION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 1</td>
<td>Engine Maintenance</td>
<td>0.5</td>
</tr>
<tr>
<td>AUTO 2</td>
<td>Fuel Systems</td>
<td>0.5</td>
</tr>
<tr>
<td>AUTO 3</td>
<td>Lubrication and Cooling</td>
<td>0.5</td>
</tr>
<tr>
<td>AUTO 4</td>
<td>Electrical Systems</td>
<td>0.5</td>
</tr>
<tr>
<td>AUTO 5</td>
<td>Brakes and Suspension</td>
<td>0.5</td>
</tr>
<tr>
<td>AUTO 6</td>
<td>Transmission and Drive Train</td>
<td>0.5</td>
</tr>
<tr>
<td>AUTO 7</td>
<td>Air Conditioning and Heating</td>
<td>0.5</td>
</tr>
</tbody>
</table>

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**3.5**

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BIOLOGY

TRANSFER PROGRAM

COMMON LOWER DIVISION MAJOR PREPARATION
FOR CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</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>
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<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 PREPARATION
FOR SPECIFIC TRANSFER INSTITUTIONS

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>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological, and Social Sciences</td>
<td>4</td>
</tr>
<tr>
<td>MICRO 200</td>
<td>Principles &amp; Applications of Microbiology</td>
<td>5</td>
</tr>
</tbody>
</table>

RECOMMENDED GENERAL EDUCATION COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 103</td>
<td>Critical and Argumentative Writing</td>
<td>3</td>
</tr>
<tr>
<td>HED 100</td>
<td>Contemporary Health Problems</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 150</td>
<td>Personal and Social Adjustment</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 241</td>
<td>Introduction to Psychobiology</td>
<td>3</td>
</tr>
</tbody>
</table>

See counselor for other options.

California State University – Dominguez Hills

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

NOTE: Math 170 or Math 116 also required for B.S. degree only.

California State University – Fullerton

There are four concentrations within the Biological Science Major:


<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 202</td>
<td>Molecular Biology/Genetics</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>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 Sciences</td>
<td>(4)</td>
</tr>
</tbody>
</table>

California State University – Long Beach

GENERAL OPTION

<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 Sciences</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>
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</table>

OPTION IN BIOLOGY EDUCATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 101</td>
<td>Elementary Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 115</td>
<td>Marine Biology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>or ESCI 110</td>
<td>Introduction to Earth Science</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 Sciences</td>
<td>(4)</td>
</tr>
<tr>
<td>MICRO 200</td>
<td>Principles &amp; Application of Microbiology</td>
<td>5</td>
</tr>
</tbody>
</table>

OPTION IN BOTANY

<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 Sciences</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>
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OPTION IN CELL & MOLECULAR BIOLOGY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MICRO 200</td>
<td>Principles &amp; Application of Microbiology</td>
<td>5</td>
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<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>
<tr>
<td>and MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
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OPTION IN ECOLOGY

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>or ESCI 110</td>
<td>Introduction to Earth Science</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>
<tr>
<td>and MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
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OPTION IN PHYSIOLOGY

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<tr>
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<th>Title</th>
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<tbody>
<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>
<tr>
<td>and MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
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OPTION IN ZOOLOGY

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>or ESCI 110</td>
<td>Introduction to Earth Science</td>
<td>(4)</td>
</tr>
<tr>
<td>or MICRO 200</td>
<td>Principles &amp; Application of Microbiology</td>
<td>(5)</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>
<tr>
<td>and MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

*After Math 116 an additional math class must be completed at CSULB after transfer.

California State University – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis 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>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</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 its writing proficiency requirement.
### COMMON LOWER DIVISION MAJOR PREPARATION FOR UNIVERSITY OF CALIFORNIA

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL 200</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
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<tr>
<td>CHEM 112</td>
<td>5</td>
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<td>CHEM 211</td>
<td>5</td>
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<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>
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</tbody>
</table>

### ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

#### University of California – Irvine

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL 202 Molecular Biology/Genetics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 190 Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 112 Elementary Statistics</td>
<td>(4)</td>
</tr>
<tr>
<td>or PSYC 210 Elementary Statistics</td>
<td>(4)</td>
</tr>
<tr>
<td>PHYS 203 Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

*(PHYS 203 may substitute for PHYS 202)*

#### University of California – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL 202 Molecular Biology/Genetics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 112* Elementary Statistics</td>
<td>4</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>PHYS 203 Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

*This statistic course will no longer be acceptable for students transferring to UCLA in Fall 2008.*

#### University of California – Riverside

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>PHYS 203 Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

UCR offers a Biology B.A., Biology B.S. and a Biological Sciences B.S. 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 eight upper division tracks of specialized coursework. Those tracks are: Biology; Cell/Molecular and Developmental Biology; Conservation Biology; Environmental Toxicology; Evolution and Ecology; Microbiology; Plant Biology; and Medical Biology.

For the Conservation Biology Track also complete GEOG 101 & GEOG 101L.

For the Biology Track take two courses 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 MAJOR PREPARATION FOR CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL 200 Principles of Biology</td>
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<tr>
<td>BIOL 201 Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
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<tr>
<td>CHEM 112 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 201 Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202 Engineering Physics</td>
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</table>

### ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

#### California State University – Long Beach

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MATH 116 Calculus for Managerial, Biological and Social Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 170 Analytical Geometry and Calculus I</td>
<td>(4)</td>
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<tr>
<td>MATH 190 Analytical Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102 General Physics</td>
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#### California State Polytechnic University – Pomona

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 211 Organic Chemistry</td>
<td>5</td>
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<tr>
<td>CHEM 212 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 100 Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102 Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 103 Critical and Argumentative Writing</td>
<td>(3)</td>
</tr>
<tr>
<td>HED 100 Contemporary Health Problems</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 101 General Introductory Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>or PSYC 150 Personal and Social Adjustment</td>
<td>(3)</td>
</tr>
<tr>
<td>or PSYC 241 Introduction to Psychobiology</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH 112 Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 116 Calculus for Managerial, Biological and Social Science</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS102 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>HED 100 Contemporary Health Problems</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 101 General Introductory Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>or PSYC 150 Personal and Social Adjustment</td>
<td>(3)</td>
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<tr>
<td>or PSYC 241 Introduction to Psychobiology</td>
<td>(3)</td>
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</table>

#### University of California – Riverside

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BOT 120 Introduction to Plant Science</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211 Organic Chemistry</td>
<td>5</td>
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<td>CHEM 212 Organic Chemistry</td>
<td>5</td>
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<tr>
<td>MATH 170 Analytical Geometry and Calculus I</td>
<td>4</td>
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<tr>
<td>MATH 190 Analytical Geometry and Calculus II</td>
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</tr>
<tr>
<td>PHYS 201 Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202 Engineering Physics</td>
<td>4</td>
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<tr>
<td>PHYS 203 Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>ZOOL 120 Introduction to Animal Biology</td>
<td>4</td>
</tr>
</tbody>
</table>
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.
See State University General Education List.

ACCOUNTING PROGRAMS

ACCOUNTING CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>*ACCT 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Fundamentals of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 131</td>
<td>Computerized Accounting-IBM</td>
<td>3.5</td>
</tr>
<tr>
<td>ACCT 133</td>
<td>Computerized Spreadsheet Accounting</td>
<td>3.5</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Intermediate Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 202</td>
<td>Intermediate Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>FIN 125</td>
<td>Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 60</td>
<td>Quickbooks Accounting</td>
<td>(2)</td>
</tr>
<tr>
<td>and ACCT 61</td>
<td>Turbo Tax Accounting</td>
<td>(2)</td>
</tr>
<tr>
<td>ACCT 240</td>
<td>Cost Accounting</td>
<td>4</td>
</tr>
<tr>
<td>or ACCT 241</td>
<td>Managerial Accounting</td>
<td>(4)</td>
</tr>
<tr>
<td>ACCT 250</td>
<td>Income Tax Accounting</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 130</td>
<td>Payroll Tax Accounting</td>
<td>(3)</td>
</tr>
<tr>
<td>FIN 51</td>
<td>Retirement Planning and Investing</td>
<td>1.5</td>
</tr>
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</table>

TOTAL CERTIFICATE REQUIREMENTS: 34.5

*Prerequisite for ACCT 101 is ACCT 100

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Accounting and complete general education requirements to achieve a minimum of 60 units.

NOTE: Although many of these courses are transferable, this Certificate/AA Degree is nontransferable.

OTHER RECOMMENDED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
<td>3</td>
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<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 147</td>
<td>Business Communications</td>
<td>3</td>
</tr>
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</table>

*Prerequisite for BUSA 101 - BUSA 100.

Please see a Business counselor or the respective department chairperson for additional alternatives.

ACCOUNTING—ADVANCED ACCOUNTING

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCT 240</td>
<td>Cost Accounting</td>
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<tr>
<td>ACCT 241</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 270</td>
<td>Fundamentals of Auditing</td>
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</tr>
<tr>
<td>ACCT 280</td>
<td>Advanced Accounting</td>
<td>3</td>
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</table>

TOTAL CERTIFICATE REQUIREMENTS: 45/46

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Meet the requirements for a Certificate of Achievement in Advanced Accounting and complete general education requirements to achieve a minimum of 60 units.

OTHER RECOMMENDED COURSE:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>LAW 110</td>
<td>Business Law</td>
<td>3</td>
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</table>

NOTE: Although many of these courses are transferable, this Certificate/AA Degree is nontransferable.
Please see a Business counselor or the respective department chairperson for additional alternatives.

ACCOUNTING—MICROCOMPUTER

ACCOUNTING CLERK

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 100</td>
<td>Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 131</td>
<td>Computerized Accounting-IBM</td>
<td>3.5</td>
</tr>
<tr>
<td>ACCT 133</td>
<td>Computerized Spreadsheet Accounting</td>
<td>3.5</td>
</tr>
<tr>
<td>FIN 125</td>
<td>Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 60</td>
<td>QuickBooks Accounting</td>
<td>(2)</td>
</tr>
<tr>
<td>and ACCT 61</td>
<td>Turbo Tax Accounting</td>
<td>(2)</td>
</tr>
<tr>
<td>FIN 51</td>
<td>Retirement Planning and Investing</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Microcomputer Hardware &amp; Applications Software</td>
<td>3</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ACCT 130</td>
<td>Payroll Tax Accounting</td>
<td>3</td>
</tr>
<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 108</td>
<td>WordPerfect for Windows</td>
<td>3.5</td>
</tr>
<tr>
<td>or BCOT 112</td>
<td>Word for Windows</td>
<td>(3.5)</td>
</tr>
<tr>
<td>BCOM 147</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>INSR 121</td>
<td>Insurance Principles: Property and Liability</td>
<td>3</td>
</tr>
</tbody>
</table>
ACCOUNTING – PAYROLL ADMINISTRATION
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
ACCT 60 Quickbooks Accounting 2
ACCT 100 Introduction to Accounting 3
ACCT 130 Payroll Tax Accounting 3
ACCT 133 Computerized Spreadsheet Accounting 3.5
ACCT 230 Advanced Payroll Accounting 3
or ACCT 250 Income Tax Accounting (3)
ACCT 231 Current Topics in Payroll 1.5
LAW 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:
ACCT 101 Fundamentals of Accounting I 4
ACCT 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/AA 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 any three of the following courses:
ACCT 130 Payroll Tax Accounting 3
ACCT 250 Income Tax Accounting 3
LAW 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:
ACCT 130 Payroll Tax Accounting 3
ACCT 250 Income Tax Accounting (3)
LAW 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/AA Degree is nontransferable.
Please see a Business Counselor or the respective department for additional alternatives.

BUSINESS ADMINISTRATION PROGRAMS
HUMAN RESOURCES MANAGEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
BA 50 Math for Business and Finance 3
BA 105 Personnel-Policy and Procedures 3
BA 113 Legal Environment of Business 3
or LAW 111 Business Law (3)
BA 104 Managing Cultural Diversity 3
BA 106 Human Resource Management 3
BA 107 Human Relations in Business 3
BA 108 Labor Management Relations 3
BA 132 Computer Applications for Managers 3
or CIS 101 Introduction to Computer Information Systems (3)
BA 156 Motivational Presentation Skills for Managers 3
BA 203 Management-Department Operations 3
BCom 147 Business Communications 3
or BCom 148 Effective Business Presentations (3)

TOTAL CERTIFICATE REQUIREMENT 33

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
1) Meet the division/department requirements; 2) Take 10 additional BA units of your choice (from BA 100 and above); 3) Complete the necessary identified general education courses to meet the Plan A, Plan B, or Plan C requirements; 4) Complete the proficiency requirements and electives, if necessary to total a minimum of 60 degree applicable units.

NOTE: Although many of these courses are transferable, this Certificate/AA 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 ADMINISTRATION

BUSINESS ADMINISTRATION MINOR
VERIFICATION 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 Verification of Completion or AA 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 ADMINISTRATION
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
<td>3</td>
</tr>
<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
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<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>
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<td>(3)</td>
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<tr>
<td>BA 115</td>
<td>Management Business</td>
<td>3</td>
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<tr>
<td>BA 120</td>
<td>Management – Accounting and Internal Control</td>
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<tr>
<td>or ACCT 100</td>
<td>Introduction to Accounting</td>
<td>(3)</td>
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<tr>
<td>BA 132</td>
<td>Computer Applications for Managers</td>
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<tr>
<td>or CIS 101</td>
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TOTAL CERTIFICATE REQUIREMENTS: 18

RECOMMENDED COURSES:

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<td>BA 104</td>
<td>Managing Cultural Diversity</td>
<td>3</td>
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<tr>
<td>BA 106</td>
<td>Human Resource Management</td>
<td>3</td>
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<tr>
<td>BA 107</td>
<td>Human Relations in Business</td>
<td>3</td>
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<tr>
<td>BA 156</td>
<td>Motivational Presentation Skills for Managers</td>
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<tr>
<td>BA 157</td>
<td>Principles of Public Relations</td>
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<td>or JOUR 157</td>
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<td>BA 171-174</td>
<td>Business Administration Work Experience</td>
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<td>BA 204</td>
<td>Project Management</td>
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<td>3</td>
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<tr>
<td>LAW 101</td>
<td>Introduction to Law</td>
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<tr>
<td>RE 101</td>
<td>Real Estate Principles</td>
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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.

Plan C (Intersegmental General Education Transfer Curriculum – IGETC – For Transfer to UC and CSU): Meet the requirements for a Certificate of Achievement in Business Administration (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/AA 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.

INTERNATIONAL BUSINESS
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:

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<td>or BA 155</td>
<td>Introduction to Global Logistics</td>
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<td>BA 101</td>
<td>International Business</td>
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<td>BA 102</td>
<td>International Business</td>
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</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>
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<td>BA 114</td>
<td>Marketing</td>
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<tr>
<td>BA 120</td>
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<tr>
<td>or ACCT 100</td>
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<td>ECON 101</td>
<td>U.S. &amp; Global Economy</td>
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<tr>
<td>or ECON 201</td>
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TOTAL CERTIFICATE REQUIREMT 21

RECOMMENDED COURSES:

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<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 132</td>
<td>Computer Applications for Managers</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 Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>BA 204</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 205</td>
<td>Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 150</td>
<td>International Business Communication</td>
<td>3</td>
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<tr>
<td>or BA 157</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>or JOUR 157</td>
<td>Principles of Public Relations</td>
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</table>
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 AA in International Business.

NOTE: Although many of these courses are transferable, this Certificate/AA 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

BA 50          Business Math (or equivalent)     3
BA 106         Human Resource Management        3
BA 107         Human Relations in Business       3
BA 114         Marketing                         3
BA 115         Management-Business               3
BA 120         Management-Accounting and Internal Control 3
or ACCT 100    Introduction to Accounting       3
BA 123         Management – Retailing            3
or BA 117      Fundamentals of Supervision      3
BA 132         Computer Applications for Managers 3
or BCOT 114    Introduction to Microsoft Office 3
BA 156         Motivational Presentation Skills for Managers 3
or BCOM 148    Effective Business Presentations 3
BA 157         Principles of Public Relations     3
or JOUR 157    Principles of Public Relations   3
or BCOM 147    Business Communications         3

TOTAL CERTIFICATE REQUIREMENTS:          30

RECOMMENDED COURSES:

BA 104         Managing Cultural Diversity       3
BA 110         Advertising                        3
LAW 111        Business Law                      3
BA 113         Legal Environment of Business      3
BA 153         Small Business Management          3
BA 204         Project Management                 3
BA 205         Organizational Leadership          3
LAW 101        Introduction to Law               3
RE 101         Real Estate Principles             3
BA 171-174     Business Administration Work Experience 1-4

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 (Intersegmental General Education Transfer Curriculum – 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/AA 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.

BUSINESS ADMINISTRATION

TRANSFER PROGRAM

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS          UNITS

California State University - Dominguez Hills

LAW 111        Business Law                     3
ACCT 100       Introduction to Accounting       3
ACCT 101       Fundamentals of Accounting I     4
ACCT 102       Fundamentals of Accounting II    4
CIS 101        Introduction to Computer Information Systems 3
ECON 201       Principles of Macroeconomics     3
ECON 202       Principles of Microeconomics     3
POL 210        International Relations for International Business Concentration 3

Plus, a transfer level Math course from General Education- (Math 112, 115, or 116 recommended).
### California State University - Fullerton

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>BA 113</td>
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<td>Introduction to Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Fundamentals of Accounting II</td>
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<tr>
<td>ACCT 133</td>
<td>Spreadsheet Accounting I</td>
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<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</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 116</td>
<td>Calculus for Managerial, Biological, and Social Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>Analytical Geometry and Calculus I</td>
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</table>

ECON 201 can be doubled counted for the major and the Cal State University General Education requirements. CSUF also requires a lower division business writing course not offered at Cerritos College.

### California State Polytechnic University – Pomona

<table>
<thead>
<tr>
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<tr>
<td>ACCT 100</td>
<td>Introduction to Accounting</td>
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<td>ACCT 101</td>
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<td>ACCT 102</td>
<td>Fundamentals of Accounting II</td>
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<tr>
<td>or ACCT 241</td>
<td>Managerial Accounting</td>
<td>4</td>
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<tr>
<td>CIS 102</td>
<td>Introduction to Microcomputer Hardware and Applications Software</td>
<td>3</td>
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<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
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<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
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</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
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<tr>
<td>or MATH 170</td>
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### California State University - Los Angeles

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<td>ACCT 100</td>
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<td>CIS 101</td>
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<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
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Students are advised to complete ENGL 103 as their Critical Thinking requirement. This will meet a graduation requirement at CSULA.

### California State University - Long Beach

<table>
<thead>
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<th>Title</th>
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<td>ECON 201</td>
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</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
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<tr>
<td>MATH 112</td>
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<tr>
<td>or MATH 115*</td>
<td>Finite Mathematics</td>
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<tr>
<td>or PSYCH 210</td>
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<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological, and Social Sciences</td>
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</table>

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 PHIL106. 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.

* Subject to change. See counselor for details.

International Business majors need four semesters of a foreign language.

### University of Southern California

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<td>or PHIL 202</td>
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<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
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<tr>
<td>or CIS 102</td>
<td>Introduction to Microcomputer Hardware and Applications Software</td>
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<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
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<td>ECON 202</td>
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<td>or PSYC 210</td>
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<td>MATH 116</td>
<td>Calculus for Managerial, Biological and Social Sciences</td>
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</tr>
<tr>
<td>or MATH 170</td>
<td>Analytical Geometry and Calculus I</td>
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### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the following common lower division requirements: ACCT 100, ACCT 101, LA W 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

<table>
<thead>
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<td>BA 101</td>
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<tr>
<td>or BA 117</td>
<td>Fundamentals of supervision</td>
<td>3</td>
</tr>
<tr>
<td>or BA 153</td>
<td>Small Business Management</td>
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<td>Human Relations in Business</td>
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<tr>
<td>or BA 156</td>
<td>Motivational Presentation Skills for Managers</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 18

RECOMMENDED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 104</td>
<td>Managing Cultural Diversity</td>
<td>3</td>
</tr>
<tr>
<td>BA 106</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 113</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 120</td>
<td>Management – Accounting and Internal Control</td>
<td>3</td>
</tr>
<tr>
<td>BA 157</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>or JOUR 157</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>BA 171-174</td>
<td>Business Administration Work Experience</td>
<td>1-4</td>
</tr>
<tr>
<td>BA 204</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 205</td>
<td>Organizational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>LAW 101</td>
<td>Introduction to Law</td>
<td>3</td>
</tr>
<tr>
<td>RE 101</td>
<td>Real Estate Principles</td>
<td>3</td>
</tr>
</tbody>
</table>

NATIONAL MANAGEMENT ASSOCIATION’S (NMA) COURSES SUPERVISORY & MANAGEMENT SKILLS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 65</td>
<td>NMA Role of the Supervisor</td>
<td>1</td>
</tr>
<tr>
<td>BA 66</td>
<td>NMA Management Principles</td>
<td>1</td>
</tr>
<tr>
<td>BA 67</td>
<td>NMA Communication Skills</td>
<td>1</td>
</tr>
<tr>
<td>BA 68</td>
<td>NMA Interpersonal Relationship Skills</td>
<td>1</td>
</tr>
<tr>
<td>BA 69</td>
<td>NMA Developing Performance</td>
<td>1</td>
</tr>
<tr>
<td>BA 75</td>
<td>NMA New Employee</td>
<td>1</td>
</tr>
<tr>
<td>BA 76</td>
<td>NMA Coaching and Counseling</td>
<td>1</td>
</tr>
<tr>
<td>BA 77</td>
<td>NMA Leadership Development</td>
<td>1</td>
</tr>
<tr>
<td>BA 78</td>
<td>NMA Business Concepts</td>
<td>1</td>
</tr>
<tr>
<td>BA 79</td>
<td>NMA Law for the Supervisor</td>
<td>1</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 Management (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 Management (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 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 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/AA 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 Code</th>
<th>Course 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>LAW 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 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 ACCT 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 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 Code</th>
<th>Course 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 157</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>or JOUR 157</td>
<td>Principles of Public Relations</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 the courses are transferable, the certificate/AA Degree is nontransferable.

CAREER OPPORTUNITIES: Prepares the student for a variety of career opportunities in business, industry, government, and self-employment.

Please see Business Counselor or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.

BUSINESS MARKETING 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
BA 110 Advertising 3
BA 114 Marketing 3
BA 121 Sales 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 115 Management – Business 3
BA 120 Management – Accounting and Internal Control 3
BA 132 Computer Applications for Managers 3
BA 156 Motivational Presentation Skills for Managers 3
BA 157 Principles of Public Relations 3
or JOUR 157 Principles of Public Relations (3)
BA 171-174 Business Administration Work Experience 1-4
RE 101 Real Estate Principles 3

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). 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/AA 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 VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 46 Business communications 3
BCOM 60 Customer Service/Telephone Techniques 1
BCOM 152 Job Search in the Business Field 1.5
BCOT 63 Keyboarding Speed/Control Building 1
BCOT 114 Introduction to Microsoft Office 3.5
BCOT 131 Beginning College Keyboarding & Document Processing 3.5
BCOT 161 Principles of Filing 1
BCOT 162 Business Spelling and Proofreading Skills 1

TOTAL VERIFICATION OF COMPLETION REQUIREMENTS: 17.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Verification 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/AA degree is nontransferable. Please see business counselors or the respective department chairperson for additional alternatives.

NOTE: Although many of these courses are transferable, this verification of completion is nontransferable.

Please see Business counselors or the respective department chairperson for additional alternatives.
MICROSOFT OFFICE USER SPECIALIST (MOS)  
CERTIFICATION ACADEMY  
VERIFICATION OF COMPLETION

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOT 112  Microsoft Word</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 113  Microsoft Excel</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 155  Microsoft Access</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 96  Microsoft PowerPoint</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 97  Microsoft Outlook</td>
<td>1.5</td>
</tr>
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</table>

TOTAL REQUIREMENTS: 13

Elective: BCOT 95, BCOT 120

NOTE: Although many of these courses are transferable, this verification of completion is nontransferable.  
Please see Business counselors or the respective department for additional alternatives.

LEGAL SECRETARIAL PROGRAM  
LEGAL SECRETARY  
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>1</td>
</tr>
<tr>
<td>or LAW 57  Legal Document Production</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 81  Legal Office Procedures</td>
<td>4</td>
</tr>
<tr>
<td>BCOT 83  Legal Office Terminology/Machine Transcription</td>
<td>4.5</td>
</tr>
<tr>
<td>BCOT 112  Microsoft Word</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 133  Advanced College Keyboarding &amp; Document Processing</td>
<td>3.5</td>
</tr>
<tr>
<td>or BCOT 120  Integrated Business Office Projects (3.5)</td>
<td></td>
</tr>
<tr>
<td>BCOT 162  Business Spelling and Proofreading Skills</td>
<td>3</td>
</tr>
<tr>
<td>LAW 101  Introduction to Law</td>
<td>3</td>
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</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 30/31

ASSOCIATE IN ARTS REQUIREMENT:  
Meet the requirements for a Certificate of Achievement in Legal Secretary and complete general education requirements and electives to achieve a minimum of 60 units.  
NOTE: Although many of these courses are transferable, this Certificate/AA Degree is nontransferable. Please see a Business counselor or the respective department chairperson for additional alternatives.

OFFICE PROGRAM  
FILE CLERK  
VERIFICATION OF COMPLETION

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>BCOM 152  Job Search in the Business Field</td>
<td>1.5</td>
</tr>
<tr>
<td>BCOT 131  Beginning College Keyboarding &amp; Document Processing</td>
<td>3.5</td>
</tr>
<tr>
<td>or BCOT 132  College Keyboarding &amp; Document Processing Review (2)</td>
<td></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 REQUIREMENTS: 7.5/9

NOTE: Although many of these courses are transferable, this Verification 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>
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<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 60  Telephone Customer Service/Techniques</td>
<td>1</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 (Two 9-week classes)</td>
<td>2</td>
</tr>
<tr>
<td>BCOT 112  Microsoft Word</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 114  Introduction to Microsoft Office</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOT 131  Beginning College Keyboarding &amp; Document Processing</td>
<td>3.5</td>
</tr>
<tr>
<td>or BCOT 132  College Keyboarding &amp; Document Processing Review (2)</td>
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</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: 27/28.5

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/AA Degree is nontransferable. Please see Business counselors or the respective department for additional alternatives.

See Cerritos College Graduation Requirements.
RECEPTIONIST

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS   UNITS
BCOM 152  Job Search in the Business Field  1.5
BCOM 60   Customer Service/Telephone Techniques  1
BCOM 161  Principles of Filing  1
TOTAL REQUIREMENTS:  5.5

NOTE: Although many of these courses are transferable, this Verification 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

DIVISION/DEPARTMENT REQUIREMENTS   UNITS
BCOM 46   Business Communications  3
BCOM 147  Business Communications  3
BCOM 152  Job Search in the Business Field  1.5
BCOT 63   Keyboarding Speed/Control Building  2
BCOT 112  Microsoft Word  3.5
BCOT 131  Beginning College Keyboarding & Document Processing  3.5
or BCOT 132  College Keyboarding & Document Processing Review  (2)
BCOT 133  Advanced College Keyboarding & Document Processing  3.5
BCOT 161  Principles of Filing  1
BCOT 162  Business Spelling and Proofreading Skills  3
TOTAL CERTIFICATE REQUIREMENTS:  22.5/24

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/AA Degree is nontransferable.
Please see Business counselors or the respective department chairperson for additional alternatives.

SECRETARIAL PROGRAM

SECRETARY/ADMINISTRATIVE ASSISTANT

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS   UNITS
BCOM 60   Customer Service/Telephone Techniques  1
BCOM 147  Business Communications  3
BCOM 152  Job Search in the Business Field  1.5
BCOT 63   Keyboarding Speed/Control Building  (Two 9 – week classes)
BCOT 96   Microsoft PowerPoint  1.5
BCOT 97   Microsoft Outlook  1.5
BCOT 112  Microsoft Word  3.5
BCOT 113  Microsoft Excel  3.5
BCOT 114  Introduction to Microsoft Office  3.5
BCOT 116  Desktop Publishing – Word for Windows  1.5
or BCOT 117  Desktop Publishing – Microsoft Publisher  (1.5)
BCOT 133  Advanced College Keyboarding & Document Processing  3.5
or BCOT 120  Integrated Business Office Projects  (3.5)
BCOT 155  Administrative Secretarial Procedures  4
BCOT 161  Principles of Filing  1
BCOT 162  Business Spelling and Proofreading Skills  3
TOTAL CERTIFICATE REQUIREMENTS:  34.5

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/AA Degree is nontransferable.
Please see Business counselors or the respective department chairperson for additional alternatives.

MEDICAL TRANSCRIPTIONIST

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS   UNITS
BCOM 46   Business Communications  3
BCOT 63   Keyboarding Speed/Control Building  1
BCOT 70   Medical Machine Transcription  4
BCOT 112  Microsoft Word  3.5
or BCOT 131  Beginning College Keyboarding & Document Processing  (3.5)
BCOT 162  Business Spelling and Proofreading Skills  3
MA 161   Medical Terminology  3
TOTAL REQUIREMENTS:  17.5

OPTIONAL SPECIALTY
COMPLETION OF ALL THE COURSES LISTED BELOW:

SECRETARY - MEDICAL ENVIRONMENT

DIVISION/DEPARTMENT REQUIREMENTS   UNITS
BCOT 71   Computers in the Medical Office  3.5
BCOT 112  Microsoft Word  3.5
BCOT 131  Beginning College Keyboarding & Documents Processing  3.5
BCOT 155  Administrative Secretarial Procedures  4
BCOT 162  Business Spelling and Proofreading Skills  3
TOTAL REQUIREMENTS:  17

Although many of these courses are transferable, this Verification of Completion is nontransferable.
Please see Business Counselors or the respective department chairperson for additional alternatives.
BUSINESS LEGAL PROGRAM
PARALEGAL ASSOCIATE IN ARTS DEGREE

SECTION A - LEGAL SPECIALTY CORE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 56</td>
<td>Introduction to Computerized Legal Software</td>
<td>3</td>
</tr>
<tr>
<td>LAW 100</td>
<td>Introduction to California Civil Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LAW 101</td>
<td>Introduction to Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 102</td>
<td>Advanced California Civil Procedures</td>
<td>3</td>
</tr>
<tr>
<td>or LAW 113</td>
<td>Fundamentals of Alternate Dispute Resolutions</td>
<td>(3)</td>
</tr>
<tr>
<td>LAW 103</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 120</td>
<td>Legal Ethics</td>
<td>3</td>
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</tbody>
</table>

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PLUS 6 UNITS SELECTED FROM THE COURSES IN SECTION “B” WITH AN ASTERISK *

PARALEGAL PROGRAM REQUIREMENT:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
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</tbody>
</table>

SECTION B

Must Complete Additional Units for a Total of 33 as are needed for an AA Degree from these Legal Specialty Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 52*</td>
<td>Law Office Management</td>
<td>3</td>
</tr>
<tr>
<td>LAW 57*</td>
<td>Legal Document Production</td>
<td>3</td>
</tr>
<tr>
<td>LAW 65*</td>
<td>Advanced Legal Technology</td>
<td>3</td>
</tr>
<tr>
<td>LAW 102*</td>
<td>Advanced California Civil Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LAW 104*</td>
<td>Advanced Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>LAW 105*</td>
<td>Introduction to Federal and California Employment, Labor, and Workers’ Compensation Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 106*</td>
<td>Bankruptcy Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 107*</td>
<td>Probate Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LAW 108*</td>
<td>Family Law Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LAW 109*</td>
<td>Torts and Personal Injury Law and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LAW 110*</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 112*</td>
<td>Estate Planning for the Paralegal</td>
<td>3</td>
</tr>
<tr>
<td>LAW 113*</td>
<td>Fundamentals of Alternate Dispute Resolutions</td>
<td>3</td>
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<tr>
<td>LAW 114*</td>
<td>Law on the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>LAW 115*</td>
<td>Elder Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 116*</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 171-174*</td>
<td>Business Paralegal Occupational Work Experience</td>
<td>(1-4)</td>
</tr>
<tr>
<td>LAW 220*</td>
<td>Landlord and Tenant Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 230*</td>
<td>Corporate Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 260*</td>
<td>Immigration Law</td>
<td>3</td>
</tr>
<tr>
<td>RE 125</td>
<td>Legal Aspects of Real Estate</td>
<td>3</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 LAW 173 or LAW 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 AA 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 AA degree or certificate. Units for the specialty may come from the Paralegal AA degree or certificate requirements from additional courses as outlined below:

OPTIONAL SPECIALTY

COMMERCIAL

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 106</td>
<td>Bankruptcy Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 220</td>
<td>Landlord and Tenant Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 230</td>
<td>Corporate Law</td>
<td>3</td>
</tr>
<tr>
<td>or LAW 110</td>
<td>Business Law</td>
<td>3</td>
</tr>
</tbody>
</table>

PROBATE & ESTATE PLANNING

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 107</td>
<td>Probate Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LAW 112</td>
<td>Estate Planning for the Paralegal</td>
<td>3</td>
</tr>
<tr>
<td>LAW 115</td>
<td>Elder Law</td>
<td>3</td>
</tr>
</tbody>
</table>

LITIGATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 102</td>
<td>Advanced California Civil Procedures</td>
<td>3</td>
</tr>
<tr>
<td>LAW 104</td>
<td>Advanced Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>LAW 109</td>
<td>Torts and Personal Injury Law and Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

FAMILY LAW

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 102</td>
<td>Advanced California Civil Procedures</td>
<td>3</td>
</tr>
<tr>
<td>or LAW 113</td>
<td>Fundamentals of Alternate Dispute Resolutions</td>
<td>(3)</td>
</tr>
<tr>
<td>LAW 104</td>
<td>Advanced Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>LAW 108</td>
<td>Family Law Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

LEGAL TECHNOLOGY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 52</td>
<td>Law Office Management</td>
<td>3</td>
</tr>
<tr>
<td>LAW 57</td>
<td>Legal Document Production</td>
<td>3</td>
</tr>
<tr>
<td>LAW 65</td>
<td>Advanced Legal Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

CRIMINAL LAW

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 116</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 104</td>
<td>Advanced Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>LAW 102</td>
<td>Advanced California Civil Procedures</td>
<td>3</td>
</tr>
<tr>
<td>or LAW 113</td>
<td>Fundamentals of Alternate Dispute Resolutions</td>
<td>3</td>
</tr>
</tbody>
</table>

BUSINESS LAW

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 110</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 113</td>
<td>Fundamentals of Alternate dispute Resolutions</td>
<td>3</td>
</tr>
</tbody>
</table>
Curricula, Requirements for Majors, Certificates and Transfer Programs

Paralegal Certificate:

A student may earn a Paralegal Certificate if the student has already completed an AA degree or BA degree prior to taking any courses applied to the Paralegal Certificate. Students must complete a total of 27 units. These units must include LAW 56, LAW 100, LAW 101, LAW 103, LAW 111, LAW 120, and the students may choose either LAW 102 or LAW 113. Any additional units needed to complete the 27 unit requirement may be taken from Section B. All 27 units must be taken at Cerritos College.

Students must consult with the Law or Counseling Department prior to entering the certificate program. Any Law courses which were taken prior to the completion of the student’s requisite AA 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 Legal Minor Verification 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: LAW 101, Introduction to Law; LAW 110, Business Law; LAW 111, Business Law; LAW 113, Fundamentals of Alternate Dispute Resolutions or LAW 161, Consumer Law.

Upon receiving your Certificate of Achievement or AA degree, a statement can be placed on your official transcript that you have completed the requirements for a Legal Minor.

A separate certification of completion of the requirements for a Legal Minor can also be issued. Check with the Law Department for more information.

Career Opportunities: This minor combined with your major provides legal knowledge essential in business, in private industry, and in self-employment.

Court Reporting and Captioning Careers

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>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>May be Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 57A</td>
<td>Beginning Aural Language Skills for Court Reporters</td>
<td>3.5</td>
<td>90</td>
</tr>
<tr>
<td>CRCC 57B</td>
<td>Advanced Aural Language Skills for Court Reports</td>
<td>3.5</td>
<td>90</td>
</tr>
<tr>
<td>CRCC 113</td>
<td>Legal Terminology</td>
<td>3</td>
<td>72</td>
</tr>
<tr>
<td>CRCC 114</td>
<td>Medical Terminology for Machine Shorthand</td>
<td>3</td>
<td>90</td>
</tr>
<tr>
<td>CRCC 115</td>
<td>Medical Shorthand for Court Reporters</td>
<td>4</td>
<td>90</td>
</tr>
<tr>
<td>CRCC 119A</td>
<td>Beginning Computer-Aided Transcription</td>
<td>3</td>
<td>2 times 99</td>
</tr>
<tr>
<td>CRCC 119C</td>
<td>Advanced Computer-Aided Transcription</td>
<td>3</td>
<td>2 times 99</td>
</tr>
<tr>
<td>CRCC 140</td>
<td>Computerized Shorthand Theory--Review/Skill Development</td>
<td>4.5</td>
<td>144</td>
</tr>
<tr>
<td>CRCC 141</td>
<td>Intermediate Computerized Shorthand</td>
<td>4.5</td>
<td>2 times 144</td>
</tr>
<tr>
<td>CRCC 142</td>
<td>Computerized Shorthand Speed Building I</td>
<td>4.5</td>
<td>2 times 180</td>
</tr>
<tr>
<td>CRCC 143</td>
<td>Computerized Shorthand Speed Building II</td>
<td>4.5</td>
<td>2 times 180</td>
</tr>
<tr>
<td>CRCC 145</td>
<td>Computerized Shorthand Speed Building III</td>
<td>4.5</td>
<td>3 times 180</td>
</tr>
<tr>
<td>CRCC 146</td>
<td>Computerized Shorthand Speed Building (140-170 wpm)</td>
<td>4.5</td>
<td>3 times 180</td>
</tr>
<tr>
<td>CRCC 147</td>
<td>Computerized Shorthand Speed Building (160-190 wpm)</td>
<td>4.5</td>
<td>4 times 180</td>
</tr>
<tr>
<td>CRCC 148</td>
<td>Computerized Shorthand Speed Building (180-210 wpm)</td>
<td>5</td>
<td>4 times 216</td>
</tr>
<tr>
<td>CRCC 149</td>
<td>Computerized Shorthand Speed Building (190-225 wpm)</td>
<td>5</td>
<td>4 times 216</td>
</tr>
<tr>
<td>CRCC 157</td>
<td>Congressional Testimony Computerized Shorthand Speed Development (160-190 wpm)</td>
<td>4.5</td>
<td>3 times 180</td>
</tr>
<tr>
<td>CRCC 158</td>
<td>Professional Practices Hearings/Conferences</td>
<td>5</td>
<td>3 times 216</td>
</tr>
<tr>
<td>CRCC 159</td>
<td>In Camera/In Camera Procedures Computerized Shorthand Speed Development (190-225 wpm)</td>
<td>5</td>
<td>3 times 216</td>
</tr>
<tr>
<td>CRCC 173/174</td>
<td>Business Court Reporting/Computerized Shorthand Occupational Work Experience</td>
<td>3/4</td>
<td>4 times 60</td>
</tr>
<tr>
<td>CRCC 185</td>
<td>CSR/RPR Examination</td>
<td>1.5</td>
<td>3 times 27</td>
</tr>
<tr>
<td>CRCC 192</td>
<td>Transcription Procedures</td>
<td>2</td>
<td>2 times 54</td>
</tr>
</tbody>
</table>

Choose from the following courses for a minimum of 35 hours:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>May be Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOT 162</td>
<td>Business Spelling and Proofreading Skills</td>
<td>3</td>
<td>54</td>
</tr>
<tr>
<td>BCOM 46</td>
<td>Business Communications</td>
<td>3</td>
<td>54</td>
</tr>
<tr>
<td>ENGL 53</td>
<td>Punctuation, Capitalization, and Spelling</td>
<td>3</td>
<td>54</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>4</td>
<td>54</td>
</tr>
<tr>
<td>ENGL 107</td>
<td>Vocabulary Building</td>
<td>3</td>
<td>54</td>
</tr>
<tr>
<td>ENGL 108</td>
<td>Vocabulary Building for Professionals</td>
<td>2</td>
<td>36</td>
</tr>
</tbody>
</table>
Choose from the following courses for a minimum of 103 hours:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 116</td>
<td>Introduction to Courtroom Procedures</td>
<td>4</td>
</tr>
<tr>
<td>CRCC 118</td>
<td>Deposition Procedures, Codes &amp; Ethics</td>
<td>4</td>
</tr>
</tbody>
</table>

Select from the above listed courses to meet the required hours of the California Court Reporters Board.

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:

- 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.
- 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.
- 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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 57B</td>
<td>Advanced Aural Language Skills for Court Reporters</td>
<td>3.5</td>
</tr>
<tr>
<td>CRCC 113</td>
<td>Legal Terminology</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 115</td>
<td>Medical Shorthand for Court Reporters</td>
<td>4</td>
</tr>
<tr>
<td>CRCC 116</td>
<td>Introduction to Courtroom Procedures</td>
<td>4</td>
</tr>
<tr>
<td>CRCC 118</td>
<td>Deposition Procedures, Codes &amp; Ethics</td>
<td>4</td>
</tr>
<tr>
<td>CRCC 119A</td>
<td>Beginning Computer-Aided Transcription</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 119D</td>
<td>Basic Concepts of Realtime</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 149</td>
<td>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.

BEGINNING REALTIME CAPTIONER/BROADCAST CAPTIONING

VERIFICATION OF COMPLETION

<table>
<thead>
<tr>
<th>DIVISION DEPARTMENT REQUIREMENTS:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 119D</td>
<td>Basic Concepts of Realtime</td>
</tr>
<tr>
<td>CRCC 130</td>
<td>Computerized Shorthand Practicum VI (190-225) WPM</td>
</tr>
<tr>
<td>CRCC 193B</td>
<td>Basic Broadcast Captioning</td>
</tr>
<tr>
<td>* CRCC 173/174 Work Experience</td>
<td>3/4</td>
</tr>
<tr>
<td>SL 101</td>
<td>Beginning American Sign Language</td>
</tr>
</tbody>
</table>

TOTAL REQUIREMENTS 15.5/16.5

*Minimum stenotype speed of 200 WPM

CART REPORTER/REALTIME CAPTIONER

VERIFICATION OF COMPLETION

<table>
<thead>
<tr>
<th>DIVISION DEPARTMENT REQUIREMENTS:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 119D</td>
<td>Basic Concepts of Realtime</td>
</tr>
<tr>
<td>CRCC 128</td>
<td>Computerized Shorthand Practicum IV</td>
</tr>
<tr>
<td>CRCC 193A</td>
<td>Basic Captioning</td>
</tr>
<tr>
<td>CRCC 173/174 Work Experience</td>
<td>3/4</td>
</tr>
<tr>
<td>SL 101</td>
<td>Beginning Sign Language</td>
</tr>
</tbody>
</table>

TOTAL REQUIREMENTS 15.5/16.5

CERTIFIED REALTIME REPORTER

VERIFICATION OF COMPLETION

<table>
<thead>
<tr>
<th>DIVISION DEPARTMENT REQUIREMENTS:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 57B</td>
<td>Advanced Aural Language Skills for Court Reporters</td>
</tr>
<tr>
<td>CRCC 119C</td>
<td>Advanced Computer-Aided Transcription</td>
</tr>
<tr>
<td>CRCC 119D</td>
<td>Basic Concepts of Realtime</td>
</tr>
<tr>
<td>* CRCC 130</td>
<td>Computerized Shorthand Practicum (190-225 wpm)</td>
</tr>
</tbody>
</table>

TOTAL REQUIREMENTS 14

PROOFREADER – COURT REPORTING METHOD

VERIFICATION OF COMPLETION

<table>
<thead>
<tr>
<th>DIVISION DEPARTMENT REQUIREMENTS:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 57B</td>
<td>Advanced Aural Language Skills for Court Reporters</td>
</tr>
<tr>
<td>CRCC 113</td>
<td>Legal Terminology</td>
</tr>
<tr>
<td>CRCC 139</td>
<td>Career Opportunities</td>
</tr>
<tr>
<td>CRCC 192</td>
<td>Transcription Procedures</td>
</tr>
</tbody>
</table>

TOTAL REQUIREMENTS 9.5
 REALTIME RAPID TEXT ENTRY
VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
CRCC 57B Advanced Aural Language 3.5
CRCC 119D Basic Concepts of Realtime 3
CRCC 125 Computer Shorthand 4.5
CRCC 139 Career Opportunities 1
CRCC 146 Computerized Shorthand 4.5

TOTAL REQUIREMENTS  16.5

SCOPIST FOR COURT REPORTERS
VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENT: UNITS
CRCC 9B Intermediate Procat Software 1
or CRCC 10B intermediate Case Catalyst (1)
CRCC 57B Advanced Aural language skills for Court Reporters 3.5
CRCC 113 Legal Terminology 3
CRCC 119C Advanced Computer-Aided Transcription (3)
or CRCC 119G Computer-Aided Transcription for Scopists 3
CRCC 139 Career Opportunities 1
CRCC 192 Transcription Procedures 2

CHOOSE 3 UNITS FROM THE FOLLOWING:
CRCC 114 Medical Terminology for Machine Shorthand 3
MA 161 Medical Terminology 3

TOTAL REQUIREMENTS:  16.5

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
AA DEGREE IN BUSINESS REAL ESTATE 60 UNITS

REAL ESTATE DEPARTMENT AWARD - 12/13 UNITS
RE 101 Real Estate Principles 3
ACCT 100 Introduction to Accounting 3
or ACCT 101 Fundamentals of Accounting I (4)
LAW 111 Business Law 3
BA 121 Sales 3
or BA 114 Marketing (3)
or BA 110 Advertising (3)

REAL ESTATE CERTIFICATE OF ACHIEVEMENT - 18/20 UNITS
DIVISION/DEPARTMENT REQUIREMENTS UNITS
RE 101 Real Estate Principles 3
RE 173/174 Work Experience/Career Internship 1/4

Choose 12-13 units from the following:
RE 50 Introduction to Real Estate Software 3
RE 52 Mortgage Loan Brokering and Lending 3
RE 120 Real Estate Finance 3
RE 125 Legal Aspects of Real Estate 3
RE 130 Real Estate Practice 3
RE 131 Real Estate Appraisal 4

CALIFORNIA REAL ESTATE CERTIFICATE - 25/26 UNITS
STATE REQUIREMENTS UNITS
RE 101 Real Estate Principles 3
RE 120 Real Estate Finance 3
RE 125 Legal Aspects of Real Estate 3
RE 130 Real Estate Practice 3
RE 131 Real Estate Appraisal 4
RE 160 Real Estate Economics 3

Electives: Select a minimum of 6 units from the following courses:
LAW 111 Business Law 3
BUS 100 Introduction to Accounting 3
BUS 101 Fundamentals of Accounting I 4
RE 50 Introduction to Real Estate Software 3
RE 52 Mortgage Loan Brokering and Lending 3
RE 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, FIN 125, RE 50, RE 51, RE 53, RE 140, RE 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/AA Degree is nontransferable.

Please see Business counselors or the respective department for additional alternatives.

REAL ESTATE LICENSE REQUIREMENTS
1. Salesperson's License:
Effective October 1, 2007, Assembly Bill (AB) 2429 will change the qualifying educational requirement for the salesperson examination and for obtaining a real estate salesperson license.

Currently, the Real Estate Law requires an applicant for a real estate salesperson examination to be enrolled in or have completed a college level course in Real Estate Principles. A successful applicant who has completed a college level course in Real Estate Principles, Real Estate Practices and one other specified real estate course will be eligible for a four-year license. A successful applicant, who has completed a college level course in Real Estate Principles, but not the other two additional courses in order to extend the license validation for a complete four year term. If the additional two courses are not completed within the 18 months, the license is automatically suspended.
Under the provision of AB 2429, original salesperson examination applicants will be required to submit evidence of completion of a three semester, or quarter unit equivalent, college-level course in Real Estate Principles, Real Estate Practice and one additional course which should be chosen from the following list of courses:

- Legal Aspects of Real Estate — Real Estate Office Administration
- Real Estate Appraisal — Computer Applications in Real Estate
- Real Estate Finance — Real Estate Economics
- Property Management — Business Law
- Escrows — Accounting
- Mortgage Loan Brokering and Lending — Common Interest Developments

The Department of Real Estate (DRE) will implement AB 2429 as follows:

1. Original salesperson examination applications post marked or submitted in person to any DRE office on or after October 1, 2007, will be required to include evidence of completion of all three required courses before being scheduled for an examination.

2. Salesperson examination applications are valid for a two-year period. Original salesperson examination applications post marked or submitted in person to any DRE office before October 1, 2007, the contain an acknowledgement that the applicant is enrolled in or has completed a Real Estate Principles course, will be entitled to continue to take the examination within the two-year period for which the application is valid.

3. Applicants, who qualify for the examination as set forth in Item 2 above, must take and pass the examination before October 1, 2007, and have the license application post marked, or submitted in person to any DRA office, before October 1, 2007, to be eligible for a conditional license.

4. Applicants who qualify for the examination as set forth in Item 2 above, but who pass the examination on or after October 1, 2007, or whose license application is post marked, or submitted in person to an DRE office on or after October 1, 2007 will be required to include evidence of completion of all three required courses before their four-year license can be issued.

5. Examination applications that contain proper verification that the applicant has completed all three required courses will be entitled to take the examination and apply for a four-year license upon the successful completion of the salesperson examination.

The remaining three courses are to be selected from the following:

- Real Estate Office Administration—Advanced Legal Aspects of Real Estate
- Advanced Real Estate 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 MAJOR PREPARATION FOR CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA

<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>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>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
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</table>

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

<table>
<thead>
<tr>
<th>Institution</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Dominguez Hills*</td>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>California State University – Fullerton*</td>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>California State University – Long Beach*</td>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>
### Curricula, Requirements for Majors, Certificates and Transfer Programs

**California State University – Los Angeles**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>4</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 Polytechnic University – Pomona**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry</td>
<td>4</td>
</tr>
<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>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
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**University of California – Irvine**

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
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<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
</tbody>
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**University of California – Los Angeles**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</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 220</td>
<td>Analytic Geometry and Calculus III</td>
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<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
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</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
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**University of California – Riverside**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry</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>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

*The above listed requirements are for a Bachelor of 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, (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>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Long Beach</td>
<td>SPAN 245</td>
<td>Introduction to Chicano/Mexican American Culture</td>
<td>3</td>
</tr>
<tr>
<td>California State University – Dominguez Hills</td>
<td>SPAN 245</td>
<td>Introduction to Chicano/Mexican American Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

See counselor regarding various concentration requirements.

**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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 245</td>
<td>Introduction to Mexican American Culture</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**

- 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
- Associate 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. AA 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 AA 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 SPECIALIZATIONS 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 teach in a state licensed preschool or child care 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.*

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development – DS1</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>Principles and Practices in Early Childhood Education - DS3</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>Early Childhood Education Curriculum – DS2</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family and Community – DS2</td>
</tr>
</tbody>
</table>

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 child care program. The student 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.

<table>
<thead>
<tr>
<th>CORE COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development – DS1</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>Principles and Practices in Early Childhood Education – DS3</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>Early Childhood Education Curriculum – DS2</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family and Community – DS2</td>
</tr>
</tbody>
</table>

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.*

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development</td>
</tr>
<tr>
<td>CDEC 10</td>
<td>Family Child Care Providers (offered Spring semester only)</td>
</tr>
<tr>
<td>CDEC 161</td>
<td>Nutrition, Health, &amp; Safety in Children's Programs</td>
</tr>
</tbody>
</table>

*TO QUALIFY FOR CREDIT FOR CERTIFICATE OF COMPLETION OR THE CERTIFICATE OF ACHIEVEMENT, COURSES NOT COMPLETED AT CERRITOS COLLEGE MUST BE COMPAREABLE 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

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 (offered in Spring semester only) 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 62 Exploring Creative Art Expression By Children – DS3 3
- CDEC 164 Early Childhood Education Practicum – DS3 3

Choose two of the following for a total of 6 units:

- CDEC 3 Early Childhood Experiences in Language Arts and Social Science 3
- CDEC 65 Music and Movement for Children 3
- CDEC 133 Early Childhood Experiences in Math and Sciences 3
- CDEC 161 Nutrition, Health & Safety in Children’s Programs 3
- CDEC 173 Early Childhood Education Occupational Work Experience 3
- CDEC 174 Early Childhood Education Occupational Work Experience (4)
CDIT 151  Infant and Toddler Development  3
CDIT 152  Infant and Toddler Programs  3
CDSA 152  School – Age Child Care Activities  3
CDSA 155  School-Age Child Care Activities – DS5  3
       (offered Fall semester only)
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 30/31

*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 30/31
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
       (offered in Spring semester only)
CDEC 230  Adult Supervision on Child Care Programs  3

TOTAL CERTIFICATE REQUIREMENTS 39/40

C3. CERTIFICATE OF ACHIEVEMENT: SCHOOL-AGE CHILD CARE

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 – DS 3  3
CDEC 161  Nutrition, Health & Safety in  
   Children’s Programs – DS 7  3
CDEC 63  Early Childhood Experiences in  
   Language Arts and Social Sciences – DS 3  3
CDEC 113  The Child, Family, and community – DS 2  3
CDSA 152  School-Age Child Care Supervision  
   and Administration – DS 6  3
       (offered in Spring semester only)
CDSA 155  School-Age Child Care Activities – DS 5  3
       (offered in Fall semester only)
CDSA 259  School-Age Child Care Practicum – DS 5  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
CDIT 151  Infant and Toddler Development  3
CDIT 152  Infant and Toddler Programs  3

C5. CERTIFICATE OF ACHIEVEMENT: CHILD DEVELOPMENT/SPECIAL EDUCATION

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
CD 110  Child Development  3
CD 124  The Child in a Diverse Society  3
CDEC 62  Exploring Creative Art Expression  
   by Children – DS 3  3
CDEC 63  Early Childhood Experiences in  
   Language Arts and Social Sciences – DS 3  3
SL 101  Beginning American Sign Language  3
PSYC 101  General Introductory Psychology  3
*CDSE 73/74  Special Education Assistant Occupational Work Experience 3 - 4

TOTAL CERTIFICATE REQUIREMENTS 29/30

*Students must be concurrently enrolled in a minimum of seven units in CDEC, including work experience. CDSE 73 requires that you work or volunteer a minimum of 15 hours per week and CDSE 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 AA 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

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDIA 90</td>
<td>3</td>
</tr>
<tr>
<td>*CDIA 99</td>
<td>3</td>
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<tr>
<td>CD 110</td>
<td>3</td>
</tr>
<tr>
<td>CD 115</td>
<td>3</td>
</tr>
<tr>
<td>CD 124</td>
<td>3</td>
</tr>
<tr>
<td>CD 139</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 62</td>
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<td>CDSE 50</td>
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<td>CDSE 52</td>
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<td>EDT 52</td>
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</tr>
<tr>
<td>EDT 110</td>
<td>2</td>
</tr>
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</table>

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 CDIA 73, CDIA 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 AA 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: CDIT 151, CDIT 152, CDSE 52

See Cerritos College Graduation Requirements. Students need advisement from a Cerritos College counselor for general education requirements.

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/AA Degree is nontransferable.

See Cerritos College graduation requirements.

COMPUTER AND INFORMATION SCIENCES PROGRAMS

COMPUTER AND INFORMATION SCIENCES NETWORKING TECHNICIANS/OPERATORS
CERTIFICATE OF ACHIEVEMENT

REQUIRED COURSES | UNITS
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>CIS 70A</td>
<td>Networking Fundamentals 3.5</td>
</tr>
<tr>
<td>CIS 70B</td>
<td>Local Area Networks 3.5</td>
</tr>
<tr>
<td>CIS 70D</td>
<td>Introduction to TCP/IP 1.5</td>
</tr>
<tr>
<td>CIS 70E</td>
<td>Router Configuration and Protocols 3.5</td>
</tr>
<tr>
<td>CIS 70F</td>
<td>Advanced Switching and Routing 3.5</td>
</tr>
<tr>
<td>CIS 70G</td>
<td>Wide Area Networks 3.5</td>
</tr>
<tr>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

Choose 10.5 units from the following courses:

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 58A</td>
<td>Windows for the COMPTIA A+ Certification Exam 3.5</td>
</tr>
<tr>
<td>CIS 75</td>
<td>SQL Administration 3</td>
</tr>
<tr>
<td>CIS 141</td>
<td>AS/400 Operations 3</td>
</tr>
<tr>
<td>CIS 105</td>
<td>Using Microsoft Windows 1.5</td>
</tr>
<tr>
<td>CIS 201</td>
<td>Systems Analysis and Design 3</td>
</tr>
<tr>
<td>CIS 205</td>
<td>Programming HTML for the Web 1.5</td>
</tr>
<tr>
<td>CIS 212A</td>
<td>Microsoft Windows 2000 Professional 3.5</td>
</tr>
<tr>
<td>CIS 212B</td>
<td>Microsoft Windows 2000 Server 3.5</td>
</tr>
<tr>
<td>CIS 213</td>
<td>Microsoft Windows Directory Services 3.5</td>
</tr>
<tr>
<td>CIS 214</td>
<td>Unix 3</td>
</tr>
<tr>
<td>CIS 215B</td>
<td>Solaris Administration I 3.5</td>
</tr>
<tr>
<td>CIS 215C</td>
<td>Solaris Administration II 3.5</td>
</tr>
</tbody>
</table>

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.

See Cerritos College graduation requirements.

COMPUTER AND INFORMATION SCIENCE OPERATOR
CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS | UNITS
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 52*</td>
<td>Data Processing Mathematics 3</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 141</td>
<td>AS/400 Operations 3</td>
</tr>
<tr>
<td>CIS 141A</td>
<td>Operate iSeries (AS/400) using Operations Navigator 1.5</td>
</tr>
</tbody>
</table>
Choose fifteen units from the following courses:

**BCOT 52** Data Entry 2
**CIS 58A** PC Operating System A+ Certification 3.5
**CIS 70A** Networking Fundamentals 3
**CIS 75** SQL/Database Administration 3
**CIS 105** Using Microsoft Windows 1.5
**CIS 121** Introduction to Internet 1.5
**CIS 140** Query/400 1
**CIS 175** RPG Programming 3
**CIS 180** Programming in C/C++ 3
**CIS 201** Systems Analysis and Design 3
**CIS 207** SQL Programming 3
**CIS 208** Oracle Database Programming 3
**CIS 212** Windows 2000 Professional and Server 3
**CIS 214** Unix 3
**CIS 271/272** CIS Occupational Work Experience 1/2/3/4

TOTAL CERTIFICATE REQUIREMENTS: 36

*Meets general education requirement, may substitute MATH 60

**Meets AA Degree general education requirements.

NOTE: CIS 52, 101, 102, or 103 meet AA 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.

Please see a counselor or the respective department for additional alternatives.

NOTE: Although many of these courses are transferable, this Certificate/AA Degree is nontransferable.
**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/AA Degree is nontransferable.

Please see counselors or the respective department for additional alternatives.

**COMPANY AND INFORMATION SCIENCES**

**SYSTEMS ANALYST**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 52*</td>
<td>Data Processing Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 70A</td>
<td>Network Fundamentals</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 102</td>
<td>Introduction to Microcomputer Hardware and Applications Software</td>
<td>3</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 151</td>
<td>Microsoft Excel for IS/IT</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 201</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 202A</td>
<td>Project Management for IT</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 207</td>
<td>Database Design and SQL Programming</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 208A</td>
<td>Oracle SQL and PL/SQL</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 80</td>
<td>Programming in Access</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 147**</td>
<td>Business Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose from the following for a total of 10 units:

<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 121</td>
<td>Introduction to Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>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 152</td>
<td>Programming in Excel VBA</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 155</td>
<td>Microsoft Access</td>
<td>3</td>
</tr>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 202B</td>
<td>Microsoft Project</td>
<td>3.5</td>
</tr>
<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>3.5</td>
</tr>
<tr>
<td>CIS 212</td>
<td>Windows 2000 Professional and Server</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>273/274</td>
<td></td>
<td></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>ASP.NET Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 42.5

*Meets AA Degree general education requirement, may substitute MATH 60
**Meets AA Degree general education requirement.

NOTE: CIS 52, 101, 102, or 103 meet AA 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/AA Degree is nontransferable.

Please see S.E.M./CIS counselors or the respective department for additional alternatives.

**COMPANY AND INFORMATION SCIENCES**

**MICROCOMPANY SPECIALIST**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 52*</td>
<td>Data Processing Mathematics</td>
<td>3</td>
</tr>
<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</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 58A</td>
<td>PC Operating System A+ Certification</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Microcomputer Hardware and Applications Software</td>
<td>3</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 105</td>
<td>Using Microsoft Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 151</td>
<td>Microsoft Excel for Information Systems/Information Technology</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 155</td>
<td>Microsoft Access</td>
<td>3</td>
</tr>
<tr>
<td>CIS 186</td>
<td>Visual Basic.NET Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOM 147**</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 52**</td>
<td>Introduction to College Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 100**</td>
<td>Freshman Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 155**</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose 6 units from the following 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 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>
<tr>
<td>CIS 206</td>
<td>XML Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 212</td>
<td>Windows 2000 Professional Server</td>
<td>3</td>
</tr>
<tr>
<td>CIS 214</td>
<td>Unix</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>273/274</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 36.5

*Meets AA Degree general education requirement, may substitute MATH 60
**Meets AA Degree general education requirement.

NOTE: CIS 52, 102, or 103 meets AA 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/AA Degree is nontransferable.

Please see counselors or the respective department for additional alternatives.

**COMPUTER AND INFORMATION SCIENCES IBM AS/400 SPECIALIST CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 52* Data Processing Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 103 Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 140 QUERY/400</td>
<td>1</td>
</tr>
<tr>
<td>CIS 141 AS/400 Operations</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 142A AS/400 Operations Part 1</td>
<td>(1.5)</td>
</tr>
<tr>
<td>and CIS 142B AS/400 Operations and Facilities Part 2</td>
<td>(1.5)</td>
</tr>
<tr>
<td>CIS 175 RPG Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 207 Database Design and SQL</td>
<td>3</td>
</tr>
<tr>
<td>CIS 222 Advanced RPG Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>or CIS 223 Visual RPG</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS 240 AS/400 Control Language Programming</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 147** Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 52** Introduction to College Composition</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 100** Freshman Composition</td>
<td>(4)</td>
</tr>
<tr>
<td>or ENGL 155** Technical Writing</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Choose 5.0 units from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 70A Network Fundamentals</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 121 Introduction to the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 141A Operate iSeries (AS/400) using Operations Navigator</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 180 Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 182 Java Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 186 Visual Basic.NET Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 205 Programming in HTML for the World Wide Web</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 271/272 CIS Occupational Work Experience-</td>
<td>1/2/3/4</td>
</tr>
<tr>
<td>CIS 273/274</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:** 31.5/32

*Meets general education requirement, may substitute MATH 60

**Meets AA Degree general education requirement, may substitute ENGL 100

**NOTE:** CIS 52 or CIS 103 meet AA 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 IBM AS/400 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/AA Degree is nontransferable.

Please see SEM/CIS counselors or the respective department for additional alternatives.

**SOFTWARE DEVELOPMENT IN JAVA VERIFICATION OF COMPLETION**

**REQUIRED COURSES** | **UNITS**
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103 Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 182 Java Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 282 Advanced Java Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 283A Java Server Pages (JSP) Programming</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL VERIFICATION REQUIREMENTS** 14

A verification of completion in the Software Development in Java Verification of Completion will be granted by the division upon completion of 14 units.

**SOFTWARE DEVELOPMENT IN C++/VISUAL C# VERIFICATION OF COMPLETION**

**REQUIRED COURSES** | **UNITS**
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103 Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 180 Programming in C/C++</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 280 Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 281 Windows Programming with Visual C#.NET</td>
<td>3</td>
</tr>
<tr>
<td>CIS 292 Data Structures</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**TOTAL VERIFICATION REQUIREMENTS** 16.5

A verification of completion in the Software Development in C++/Visual C# Verification of Completion will be granted by the division upon completion of 16.5 units.

**IBM I_SERIES 400 SERVER OPERATORS VERIFICATION OF COMPLETION**

**REQUIRED COURSES** | **UNITS**
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103 Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 141 iSeries 400 Operations</td>
<td>3</td>
</tr>
<tr>
<td>CIS 141A Operations Navigator</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 240 Control Language Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL VERIFICATION REQUIREMENTS** 11

A verification of completion in the IBM iSeries 400 Operations Verification of Completion will be granted by the division upon completion of 11 units.
SOFTWARE DEVELOPMENT IN
DATABASE APPLICATION
VERIFICATION OF COMPLETION

REQUIRED COURSES                              UNITS
CIS 103 Computer Programming Logic          3.5
CIS 186 Visual Basic.NET Programming        3.5
CIS 207 Database Design and SQL              3.5
CIS 221B Database Programming in VB.NET      3

TOTAL VERIFICATION REQUIREMENTS              13.5

A verification of completion in the Software Development Database Application Verification of Completion will be granted by the division upon completion of 13.5 units.

LINUX APPLICATION PRODUCTIVITY
VERIFICATION OF COMPLETION

REQUIRED COURSES                              UNITS
CIS 85 Unix Productivity Tools                3.5
CIS 101 Introduction to CIS                  3
CIS 214 Unix/Linux Fundamentals               3.5

TOTAL VERIFICATION REQUIREMENTS              10

A verification of completion in the Linux Application Productivity Verification will be granted by the division upon completion of 10.5 units.

MICROSOFT SYSTEMS ADMINISTRATOR
VERIFICATION OF COMPLETION

REQUIRED COURSES                              UNITS
CIS 212 Introduction to Microsoft Windows Administration  3.5
CIS 213A Windows Activity Directory Administration 3.5
or CIS 213J Implementing a Windows 2003 Active Directory (3.5)
CIS 213B Windows Network Infrastructure          3.5
or CIS 213I Implementing a Windows 2003 Network Infrastructure (3.5)
CIS 213F Windows 2003 Server Administration     3.5
CIS 213K Designing A Windows Active Directory and Network Infrastructure 3.5

TOTAL VERIFICATION REQUIREMENTS              17.5

A verification of completion in the Microsoft Systems Administrator Verification of Completion will be granted by the division upon completion of 17.5 units.

NETWORK ADMINISTRATOR
VERIFICATION OF COMPLETION

REQUIRED COURSES                              UNITS
CIS 70A Network Fundamentals                  3.5
CIS 70B LAN                                   3.5
CIS 70D TCP/IP                                1.5
CIS 70E Switching/Routing                    3.5
CIS 70F Advanced Switching/Routing           3.5

TOTAL VERIFICATION REQUIREMENTS              15.5

A verification of completion in the Network Administration Verification of Completion will be granted by the division upon completion of 15.5 units.

UNIX ADMINISTRATION
VERIFICATION OF COMPLETION

REQUIRED COURSES                              UNITS
CIS 214 Unix/Linux Fundamentals               3.5
CIS 215B Solaris Administration I              3.5
CIS 215C Solaris Administration II            3.5

TOTAL VERIFICATION REQUIREMENTS              10.5

A verification of completion in the Unix Administration Verification of Completion will be granted by the division upon completion of 10.5 units.

COMPUTER INFORMATION SYSTEMS ANALYST
VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS:              UNITS
CIS 103 Computer Programming Logic            3.5
CIS 186 Visual Basic.NET Programming          3.5
CIS 201 Systems Analysis and Design          3
CIS 202A Project Management for IT            3.5
CIS 202B Microsoft Project                    3.5

TOTAL VERIFICATION REQUIREMENTS              17

A verification of completion in the Computer Information Systems Analyst Verification will be granted by the division upon completion of 17 units.
DATABASE APPLICATION DEVELOPMENT
FOR MICROSOFT ACCESS
VERIFICATION OF COMPLETION

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 80</td>
<td>Programming in Access</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 155</td>
<td>Microsoft Access</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 186</td>
<td>Visual Basic.NET Programming</td>
<td>3.5</td>
</tr>
</tbody>
</table>

TOTAL VERIFICATION REQUIREMENTS 14

NOTE: CIS 103 can be replaced by CIS 180 or CIS 182 with the approval of the certificate advisor.

A verification of completion in the Database Application Development for Microsoft Access Verification of Completion will be granted by the division upon completion of 14 units.

WEB SERVER DEVELOPMENT
VERIFICATION 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>
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</tbody>
</table>

TOTAL VERIFICATION REQUIREMENTS 12

A verification of completion in the Web Server Development Verification of Completion will be granted by the division upon completion of 12 units.

WEB CLIENT DEVELOPMENT
VERIFICATION 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 160</td>
<td>Web Page Development</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 205</td>
<td>Programming in HTML</td>
<td>1.5</td>
</tr>
</tbody>
</table>

TOTAL VERIFICATION REQUIREMENTS 10

A verification of completion in the Web Client Development Verification of Completion will be granted by the division upon completion of 10 units.

SOFTWARE DEVELOPMENT IN VISUAL BASIC.NET
VERIFICATION 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 VERIFICATION REQUIREMENTS 13

A verification of completion in the Software Development in Visual Basic.NET Verification of Completion will be granted by the division upon completion of 13 units.

A+ CERTIFICATION PREPARATION
VERIFICATION 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 VERIFICATION REQUIREMENTS 7

A verification of completion in the A+ Certification Preparation Verification will be granted by the division upon completion of 7 units.

CYBER SECURITY
VERIFICATION 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 VERIFICATION REQUIREMENTS 17

A verification of completion in the Cyber Security Certificate will be granted by the division upon completion of 17 units.

SOFTWARE DEVELOPMENT IN VISUAL BASIC.NET
VERIFICATION 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 VERIFICATION REQUIREMENTS 13

A verification of completion in the Software Development in Visual Basic.NET Verification of Completion will be granted by the division upon completion of 13 units.
SOFTWARE DEVELOPMENT IN THE UNIX/LINUX ENVIRONMENT

VERIFICATION OF COMPLETION

REQUIRED COURSE

<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 VERIFICATION REQUIREMENTS 14

A verification of completion in the Software Development in the Unix/Linux Environment Verification of Completion will be granted by the division upon completion of 14 units.

COMPUTER SCIENCE TRANSFER PROGRAM

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 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>
</tbody>
</table>

ADDITIONAL LOWER DIVISION MAJOR PREPARATION

FOR SPECIFIC TRANSFER INSTITUTIONS

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>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>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

NOTE: students entering the computer science program must earn a grade of “C” or better in each course taken in the department and in all direct and indirect prerequisites courses before advancing to the next level course.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>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>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>
</tbody>
</table>

California State University – Fullerton

A maximum of 6 units of a grade of “D- (.7) through “D+” (1.3) can count towards the Computer Science technical electives or the requirements in related fields (excluding the mathematics requirement).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 214</td>
<td>Unix</td>
<td>3</td>
</tr>
<tr>
<td>CIS 292</td>
<td>Data Structures</td>
<td>3.5</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Sciences</td>
<td>4</td>
</tr>
</tbody>
</table>

One of the following Physical Science Combinations:

<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>or CHEM 111</td>
<td>General Chemistry</td>
<td>(3)</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>(3)</td>
</tr>
<tr>
<td>or GEOL 101</td>
<td>Physical Geology</td>
<td>(4)</td>
</tr>
<tr>
<td>GEOL 201</td>
<td>Earth History</td>
<td>(4)</td>
</tr>
</tbody>
</table>

NOTE: All CS students must select an elective track from the following: multimedia and digital game technologies, internet and enterprise computing tech, software engineering, scientific computing, and customized after transfer to CSUF.

California State Polytechnic University – Pomona

<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 230</td>
<td>Assembly Programming for Microcomputers</td>
<td>4</td>
</tr>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 282</td>
<td>Advanced JAVA Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 292</td>
<td>Data Structures</td>
<td>3.5</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytical Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</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>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

University of California – Irvine

(Information and Computer Science/Computer Science Majors)

<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 182</td>
<td>Java Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 292</td>
<td>Data Structures</td>
<td>3.5</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
</tbody>
</table>

In addition to the above requirements the Computer Science major also requires one of the following Science combinations:

<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>or PHYS 201</td>
<td>Engineering Physics</td>
<td>(4)</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>CHEM 112</td>
<td>General Chemistry</td>
<td>(5)</td>
</tr>
<tr>
<td>or BIOL 100</td>
<td>Principles of Biology</td>
<td>(5)</td>
</tr>
<tr>
<td>or BIOL 201</td>
<td>Principles of Biology</td>
<td>(5)</td>
</tr>
</tbody>
</table>

Applicants to the Information and Computer Science and Computer Science major must complete 1) one year of calculus and 2) one year of computer science courses including a UC-transferable programming course (with a grade of B or better for Computer Science majors).
Curricula, Requirements for Majors, Certificates and Transfer Programs

University of California – Los Angeles

CIS 180 Programming in C/C++ 3
or CIS 280 Object-Orientated Programming in C++ (3)
CIS 230 Assembly Programming for Microcomputers 4
CIS 292 Data Structures 3.5
MATH 190 Analytic Geometry and Calculus II 4
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 103 Philosophical Reasoning: Critical Thinking in Philosophy (3)
or PSYC 103 Critical Thinking in Psychology (3)
or SPCH 235 Fundamentals of Argumentation and Persuasion (3)

Computer Science is highly competitive and requires a minimum of UC-transferable cumulative GPA of 3.2 for consideration. Recommend 1 course from each of the following categories: arts, Humanities, Social Sciences and life science. 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)

CERTIFICATE OF ACHIEVEMENT – FULL TIME STUDENT

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 50A</td>
<td>Introductory Cosmetology I</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 50B</td>
<td>Introductory Cosmetology II</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 50C</td>
<td>Introductory Cosmetology III</td>
<td>6.5</td>
</tr>
</tbody>
</table>
or COS 70A | Introductory Cosmetology | (8.0) |
| COS 51A | Intermediate Cosmetology I | 6.5 |
| COS 51B | Intermediate Cosmetology II | 6.5 |
| COS 51C | Intermediate Cosmetology III | 6.5 |
or COS 70B | Intermediate Cosmetology | (8.0) |
| COS 52A | Advanced Cosmetology I | 6.5 |
| COS 52B | Advanced Cosmetology II | 6.5 |
| COS 52C | Advanced Cosmetology III | 6.5 |
or COS 70C | Advanced Cosmetology Manipulation | (8.0) |

MINIMUM UNITS REQUIRED

58.5

MINIMUM HOURS REQUIRED

1600

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.

CERTIFICATE OF ACHIEVEMENT – PART TIME STUDENTS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 60A</td>
<td>Introductory Cosmetology I</td>
<td>10.0</td>
</tr>
<tr>
<td>COS 60B</td>
<td>Introductory Cosmetology II</td>
<td>10.0</td>
</tr>
</tbody>
</table>
or COS 71A | Introductory Cosmetology | (4.0) |
| and/or COS 71B | Introductory Cosmetology II | (4.0) |
| COS 61A | Intermediate Cosmetology I | 10.0 |
| COS 61B | Intermediate Cosmetology II | 10.0 |
or COS 72A | Intermediate Cosmetology I | (4.0) |
| and/or COS 72B | Intermediate Cosmetology II | (4.0) |
| COS 62A | Advanced Cosmetology I | 10.0 |
| COS 62B | Advanced Cosmetology II | 10.0 |
or COS 73A | Advanced Cosmetology I | (4.0) |
| and/or COS 73B | Advanced Cosmetology II | (4.0) |

COS 63 may be repeated for a maximum of 10.0 units as necessary to complete the 1600 hours required by the Bureau of Barbering and Cosmetology.

These courses are designed to permit the student to complete 1600 hours necessary to take the State Board of Cosmetology examination.

COS 1 | Cosmetology Salon Preparation | 1.0 |
COS 1L | Cosmetology Skills Development Lab | 0.5 |

This is an introductory course providing an overview of cosmetology careers as a cosmetologist, esthetician, or manicurist. The emphasis will be understanding the requirements required to achieve a cosmetology license.

COS 25 | Introduction to Cosmetology Careers | 2.0 |

Employment Opportunities upon Completion of the Program: Hair Stylist or Hair Technician.

97
**ESTHETICIAN PROGRAM**

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 54</td>
<td>Introductory Esthetician</td>
<td>10</td>
</tr>
<tr>
<td>COS 54A</td>
<td>Advanced Esthetician</td>
<td>10</td>
</tr>
</tbody>
</table>

**RECOMMENDED ELECTIVES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 100</td>
<td>Fundamental of Business</td>
<td>3</td>
</tr>
<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 114</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BA 117</td>
<td>Introduction to Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BA 121</td>
<td>Sales</td>
<td>3</td>
</tr>
<tr>
<td>BA 153</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BCOT 114</td>
<td>Introduction to Microsoft Office</td>
<td>3.5</td>
</tr>
<tr>
<td>ACCT 60</td>
<td>Quick Book Accounting</td>
<td>1.5</td>
</tr>
<tr>
<td>TH 123</td>
<td>Stage Make-up</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL ELECTIVES UNITS: 26

**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 5:30 p.m. – 10:30 p.m. Monday through Thursday. It requires two regular semesters to complete the 600 – hours 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 and electives as needed.

See Cerritos College Graduation Requirements

**COURT REPORTING-SEE BUSINESS COURT REPORTING**

**CULINARY ARTS-CHEF’S TRAINING CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 52</td>
<td>Food Production</td>
<td>6</td>
</tr>
<tr>
<td>CA 53</td>
<td>Commercial Food Production: Pantry Items</td>
<td>9.5</td>
</tr>
<tr>
<td>CA 54</td>
<td>Commercial Food Production: Meats &amp; Poultry</td>
<td>9.5</td>
</tr>
<tr>
<td>CA 60</td>
<td>Foods Purchase and Control</td>
<td>3</td>
</tr>
<tr>
<td>CA 65</td>
<td>Food Costing</td>
<td>2</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: 31

**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 foods 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 AA Degree the student must complete the AA 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.

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 100</td>
<td>Dance Appreciation</td>
</tr>
<tr>
<td>DANC 101</td>
<td>History of Dance</td>
</tr>
<tr>
<td>DANC 105</td>
<td>Introduction to Dance Movement</td>
</tr>
<tr>
<td>DANC 106A</td>
<td>Beginning Ballet</td>
</tr>
<tr>
<td>DANC 106B</td>
<td>Intermediate Ballet</td>
</tr>
<tr>
<td>DANC 108A</td>
<td>Dance, Modern, Beginning</td>
</tr>
<tr>
<td>DANC 108B</td>
<td>Dance, Modern, Intermediate</td>
</tr>
<tr>
<td>DANC 110</td>
<td>Commercial Dance</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

**CHOREOGRAPHY OR PERFORMANCE EMPHASIS**

Optional. For students wishing additional dance experience in the areas of choreography or performance

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 120</td>
<td>Partnering for Dance</td>
</tr>
<tr>
<td>DANC 130</td>
<td>Choreography</td>
</tr>
<tr>
<td>DANC 131</td>
<td>Dance Notation</td>
</tr>
<tr>
<td>DANC 133</td>
<td>Dance Production</td>
</tr>
<tr>
<td>DANC 134</td>
<td>Dance Performance</td>
</tr>
<tr>
<td>DANC 136</td>
<td>Dance Repertory</td>
</tr>
</tbody>
</table>

**RECOMMENDED ELECTIVE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 50</td>
<td>Individualized Dance Development</td>
</tr>
<tr>
<td>DANC 107</td>
<td>Ballet Variations</td>
</tr>
<tr>
<td>DANC 121</td>
<td>Latin Social</td>
</tr>
<tr>
<td>DANC 122</td>
<td>Middle Eastern Dance</td>
</tr>
<tr>
<td>DANC 123</td>
<td>African Dance</td>
</tr>
<tr>
<td>DANC 124</td>
<td>Hip Hop Dance</td>
</tr>
<tr>
<td>DANC 125</td>
<td>Introduction to Ballroom</td>
</tr>
<tr>
<td>DANC 132</td>
<td>Dance and Digital Technology</td>
</tr>
<tr>
<td>DANC 135</td>
<td>Dance Workshop</td>
</tr>
<tr>
<td>DANC 140</td>
<td>Beginning Jazz Dance</td>
</tr>
<tr>
<td>DANC 141</td>
<td>Intermediate Jazz Dance</td>
</tr>
<tr>
<td>DANC 142</td>
<td>Beginning Tap Dance</td>
</tr>
<tr>
<td>DANC 143</td>
<td>Intermediate Tap Dance</td>
</tr>
<tr>
<td>DANC 144</td>
<td>Dance for Musical Theatre</td>
</tr>
<tr>
<td>PE 138</td>
<td>Yoga</td>
</tr>
<tr>
<td>PE 139</td>
<td>Pilates Conditioning</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete the above major requirements and all AA degree education requirements for a total of least 60 units.

**TRANSFER REQUIREMENTS**

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 108A</td>
<td>Modern Dance (Beginning)</td>
</tr>
<tr>
<td>DANC 108B</td>
<td>Modern Dance (Intermediate)</td>
</tr>
<tr>
<td>DANC 106A</td>
<td>Ballet (Beginning)</td>
</tr>
<tr>
<td>DANC 106B</td>
<td>Ballet (Intermediate)</td>
</tr>
<tr>
<td>DANC 101</td>
<td>History of Dance</td>
</tr>
<tr>
<td>TH 140</td>
<td>Theatre Dance - Beginning Jazz</td>
</tr>
<tr>
<td>TH 141</td>
<td>Theatre Dance - Intermediate Jazz</td>
</tr>
</tbody>
</table>

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

**California State University – Fullerton:**

- DANC 106B Intermediate Ballet | 2
- DANC 108A Dance, Modern Beginning | 2
- DANC 108B Dance, Modern Intermediate | 2
- DANC 130 Choreography | 3
- DANC 131 Dance Notation | 3

See counselor for additional unit requirements for this emphasis.

**University of California – Irvine:**

Dance (All emphases electives)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 130</td>
<td>Choreography</td>
</tr>
<tr>
<td>DANC 101</td>
<td>History of Dance (lecture)</td>
</tr>
</tbody>
</table>

And one course from:

- DANC 109 Introduction to Dance Cultures of the World | 2
- or DANC 125 Introduction to Ballroom Dance | 2
- or DANC 121 Latin Social Dance | 2
- or DANC 142 Theatre Dance Beginning Tap | 2
- or DANC 143 Theatre Dance Intermediate Tap | 2

**Choreography Emphasis and/or Performance Emphasis:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 110</td>
<td>Fundamentals of Acting</td>
</tr>
</tbody>
</table>

**Choreography Emphasis:**

- TH 222 Stage Lighting | 3

See counselor for additional unit requirements for this emphasis.

The department offers two degree programs within dance, one with a broad background in dance theory and practice and the other with a specialization in either choreography or performance.

See counselor for details and additional requirements.

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 AA degree general education requirements for a total of 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.
See State University General Education List.

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, Ext. 2550.
2. Return completed application to the Health Occupations Division, 11110 Alondra Blvd., Norwalk, California 90650.
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</td>
<td>Applied Dental Science I</td>
</tr>
<tr>
<td>DA 52</td>
<td>Dental Radiography I</td>
</tr>
<tr>
<td>DA 53</td>
<td>Introduction to Chairside Assisting</td>
</tr>
<tr>
<td>DA 54</td>
<td>Introduction to Operatory Procedures</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECOND SEMESTER</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA 61</td>
<td>Applied Dental Science II</td>
</tr>
<tr>
<td>DA 62</td>
<td>Dental Radiography II</td>
</tr>
<tr>
<td>DA 63</td>
<td>Advanced Chairside Assisting</td>
</tr>
<tr>
<td>DA 64</td>
<td>Dental Office Management</td>
</tr>
<tr>
<td>DA 65</td>
<td>Clinical I Dental Schools</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUMMER SESSION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA 75</td>
<td>Clinical II Cooperative Office Training</td>
</tr>
</tbody>
</table>

| TOTAL CERTIFICATE REQUIREMENTS | 32 |

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 AA 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 clearing 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 requested 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

FIRST YEAR

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
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<td></td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Second Semester</td>
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<td></td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
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</tbody>
</table>

SUMMER SESSION

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 150C Clinical Dental Hygiene IIA</td>
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</table>

SECOND YEAR

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 232L Dental Materials Laboratory</td>
</tr>
<tr>
<td>DH 234 Dental Care for the Special Patient</td>
</tr>
<tr>
<td>DH 235 Dental Hygiene Clinical Sciences III</td>
</tr>
<tr>
<td>DH 235C Clinical Dental Hygiene III</td>
</tr>
<tr>
<td>DH 238L Community Dental Health Laboratory I</td>
</tr>
<tr>
<td>DH 239 Dental Health Education &amp; Research I</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
</tr>
</tbody>
</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH 244 Ethical Issues in Dental Hygiene</td>
</tr>
<tr>
<td>DH 245 Dental Hygiene Clinical Sciences IV</td>
</tr>
<tr>
<td>DH 245C Clinical Dental Hygiene IV</td>
</tr>
<tr>
<td>DH 248L Community Dental Health Laboratory II</td>
</tr>
<tr>
<td>DH 249 Dental Health Education and Research II</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE | 53
The following requirements also must be completed to qualify for the AA Degree:
- General Introductory Psychology (PSYC 101)
- Freshman Composition (ENGL 100)
- Speech (SPCH 100, 130, 132, 150 or 235)
- American Political Institutions (POL 101 or 201) OR History (HIST 101, 201 and 202)
- Introductory Sociology Principles (SOC 101, 201, 215, PHIL 104, ANTH 100 or 101)
* Humanities OR Fine Arts (3 units)
* See Cerritos College General Education Requirements for the appropriate lists of courses acceptable for meeting the Humanities and Fine Arts Requirements.

**CAREER OPPORTUNITIES:** Upon completion of the Associate in Arts Degree Program and after passing the State Licensing Examinations a student may seek employment as a dental hygienist with individual dentists, clinics, school districts and various other institutions.

**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.)*

**DENTAL HYGIENE TRANSFER PROGRAM**

**University of Southern California**

Minimum entrance requirements:
- BIOL 201
  - or BIOL 200
- A&P 200
- CHEM 111
- CHEM 112
- ENGL 100
- ENGL 102 OR ENGL 103
- PSYC 101
- SOC 101
- SPCH 100
  - or SPCH 130

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**

A moratorium has been placed on new admissions to the UCSF School of Dentistry Dental Hygiene program, effective for the Fall 2004 session. No new students will be admitted to the program at this time.

Please refer to the UCSF School of Dentistry Webpage [http://dentistry.ucsf.edu](http://dentistry.ucsf.edu) for developments on the Dental Hygiene program.

**ECONOMICS TRANSFER PROGRAM**

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

**California State University – Long Beach**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>ACCT 101</td>
<td>Fundamentals of Accounting</td>
<td>4</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological &amp; Soc. 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>

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; PSYC 101; SOC 220, SOC 101.

**Option in Mathematical Economics and Economic Theory**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 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>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

**Business Economics - B.A.**

Same requirements as Economics except that the minimum of two courses outside Economics is not required.

**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>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>ACCT 101</td>
<td>Fundamentals of Accounting</td>
<td>4</td>
</tr>
<tr>
<td>and ACCT 133</td>
<td>Spreadsheet Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological &amp; Soc. Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or 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>
<tr>
<td>or ACCT 102</td>
<td>Fundamentals of Accounting II</td>
<td>(4)</td>
</tr>
<tr>
<td>and ACCT 133</td>
<td>Spreadsheet Accounting I</td>
<td>(3)</td>
</tr>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
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<tbody>
<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 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Additional courses required for concentrations.**

**General Economics Concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of Accounting</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>(4)</td>
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</tbody>
</table>
### Quantitative Economics Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 171</td>
<td>Visual Basic Programming</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological &amp; Soc.Sciences</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>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 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>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 103</td>
<td>Critical and Argumentative Writing</td>
<td>(3)</td>
</tr>
<tr>
<td>or PHIL 103</td>
<td>Philosophical Reasoning: Critical Thinking in Philosophy</td>
<td>(3)</td>
</tr>
<tr>
<td>or PSYC 103</td>
<td>Critical Thinking in Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>or SPCH 235</td>
<td>Fundamentals of Argumentation and Persuasion</td>
<td>(3)</td>
</tr>
</tbody>
</table>

### Additional courses required for options.

#### Option 1: Applied Economics

- ACCT 101 Fundamentals of Accounting I 4
- and ACCT 102 Fundamentals of Accounting II 4
- CIS 101 Introduction to Computer Information Systems 3
- MATH 170 Analytic Geometry and Calculus I 4
- or MATH 116 Calculus for Managerial, Biological & Soc.Sciences 4

### Option 2: Social and Behavioral Sciences

- BUSA 101 Fundamentals of Accounting I 4
- and BUSA 102 Fundamentals of Accounting II 4
- MATH 116 Calculus for Managerial, Biological & Soc.Sciences 4

### Additional courses recommended.

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.

### 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 and www.admissions.ucla.edu.

#### 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.econ.ucla.edu and www.admissions.ucla.edu.

#### University of California – Irvine

### ECONOMICS, B.A.

Transfer applicants with the highest grades overall and who have satisfactorily completed course prerequisites will be given preference for admission. All applicants must complete one course in microeconomics, one course in macroeconomics, and one semester or two quarters of approved calculus. Prospective students are advised to complete a second semester of calculus, in addition to the courses required for transfer student admission.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 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>
<tr>
<td>FREN 203*</td>
<td>Intermediate French, Advanced Level I</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>
<tr>
<td></td>
<td>*The 6th quarter of the same foreign language will have to be completed at UCLA.</td>
<td></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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 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>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>and MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>4</td>
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<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>(3)</td>
</tr>
<tr>
<td>or CIS 103</td>
<td>Computer Programming Logic</td>
<td>(3.5)</td>
</tr>
<tr>
<td>or CIS 182</td>
<td>JAVA Programming</td>
<td>(3.5)</td>
</tr>
<tr>
<td>or CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>(3)</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.

**BUSINESS ECONOMICS, B.A.**

Transfer applicants with the highest grades overall who have satisfactorily completed course prerequisites will be given preference for admission. All applicants must complete one course in microeconomics, one course in macroeconomics theory and one semester or two quarters of approved calculus.

- **ECON 201** Principles of Macroeconomics 3
- **ECON 202** Principles of Microeconomics 3
- **MATH 170** Analytic Geometry and Calculus I 4
  - **and** **MATH 190** Analytic Geometry and Calculus II 4
- **MATH 220** Analytic Geometry and Calculus III 4
  - **and** **MATH 240** Calculus and Differential Equations 4
- **CIS 101** Introduction to Computer Information Systems 3
  - or **CIS 101** Introduction to Computer Information Systems (3)
- **CIS 201** Computer Programming Logic (3.5)
- **CIS 182** JAVA Programming (3.5)
- **CIS 280** Object-Oriented Programming in C++ (3)

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.

**University of California – Riverside**

Completion of the course work listed below is not mandatory for admission into this major.

However, students are advised to complete as much lower division course preparation as possible prior to transfer, to be ready for upper division course work.

- **ECON 201** Principles of Macroeconomics 3
- **ECON 202** Principles of Microeconomics 3
- **MATH 170** Analytic Geometry and Calculus I 4
  - **and** **MATH 190** Analytic Geometry and Calculus II 4

**BUSINESS ECONOMICS, B.A.**

Completion of the course work listed below is not mandatory for admission into this major. However, students are advised to complete as much lower division course preparation as possible prior to transfer, to be ready for upper division course work.

- **ECON 201** Principles of Microeconomics 3
- **ECON 201** Principles of Macroeconomics 3
- **ACCT 101** Fundamentals of Accounting 4

(Note: Cerritos’ BUSA 102 is accepted in lieu of the UCR upper division course, BUS 108 “Financial Evaluation and Managerial Analysis”. Students who choose to complete this course prior to transfer will not be required to take BUS 108, but will need to make up the upper division units after transfer.)

- **MATH 170** Analytic Geometry and Calculus I 4
  - **and** **MATH 190** Analytic Geometry and Calculus II 4

**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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>EDT 100</td>
<td>Integration of the Internet to the Curriculum</td>
</tr>
<tr>
<td>EDT 103</td>
<td>Spreadsheets for Educators</td>
</tr>
<tr>
<td>EDT 104</td>
<td>Word Processing for Educators</td>
</tr>
<tr>
<td>EDT 105</td>
<td>PowerPoint for Educators</td>
</tr>
<tr>
<td>EDT 111</td>
<td>Web Design Using FrontPage</td>
</tr>
<tr>
<td>EDT 125</td>
<td>Fundamentals of Teaching Online Courses</td>
</tr>
<tr>
<td>EDT 19</td>
<td>Fundamentals of Teleconferencing</td>
</tr>
<tr>
<td>EDT 43</td>
<td>Ed Tech Occupational Work Experience</td>
</tr>
<tr>
<td>EDT 50</td>
<td>Preparation for Online Learning</td>
</tr>
<tr>
<td>EDT 51</td>
<td>Email for Educators</td>
</tr>
<tr>
<td>EDT 52</td>
<td>Windows for Educators</td>
</tr>
<tr>
<td>EDT 53</td>
<td>Macintosh for Educators</td>
</tr>
<tr>
<td>EDT 57</td>
<td>Apple/Claris Works for Educators</td>
</tr>
<tr>
<td>EDT 67</td>
<td>Inspiration Presentations</td>
</tr>
<tr>
<td>EDT 68</td>
<td>Using KidPix</td>
</tr>
<tr>
<td>EDT 81</td>
<td>Videos for School Use</td>
</tr>
<tr>
<td>EDT 101</td>
<td>Creating Curriculum Projects Using the Internet</td>
</tr>
<tr>
<td>EDT 106</td>
<td>Access for Educators</td>
</tr>
<tr>
<td>EDT 107</td>
<td>Desktop Publishing for Educators</td>
</tr>
<tr>
<td>EDT 108</td>
<td>Photoshop Elements for Educators</td>
</tr>
<tr>
<td>EDT 109</td>
<td>Developing Campus Based Portfolios</td>
</tr>
<tr>
<td>EDT 112</td>
<td>Virtual Curriculum</td>
</tr>
<tr>
<td>EDT 114</td>
<td>Microsoft Producer for Educators</td>
</tr>
<tr>
<td>EDT 115</td>
<td>Technology Integration in Education</td>
</tr>
<tr>
<td>EDT 119</td>
<td>Hardware and Software Considerations for Educators</td>
</tr>
<tr>
<td>EDT 120</td>
<td>Exploring Assistive Technology in Education</td>
</tr>
<tr>
<td>EDT 121</td>
<td>Using Handheld Computers in Education</td>
</tr>
<tr>
<td>EDT 122</td>
<td>Fundraising/Grant Writing for Educators</td>
</tr>
<tr>
<td>EDT 123</td>
<td>Internet tools for Educators</td>
</tr>
<tr>
<td>EDT 132</td>
<td>Digital Music in the Classroom</td>
</tr>
<tr>
<td>EDT 137</td>
<td>iMovie/Movie Maker in Education</td>
</tr>
<tr>
<td>EDT 138</td>
<td>Teaching with Clay Animation</td>
</tr>
<tr>
<td>EDT 150</td>
<td>Podcasting in Education</td>
</tr>
<tr>
<td>ART 196</td>
<td>Introduction to Designing Web Graphics</td>
</tr>
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</table>

11

**Additional Requirements – You must complete 7 units in the following area:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>EDT 19</td>
<td>Fundamentals of Teleconferencing</td>
</tr>
<tr>
<td>EDT 43</td>
<td>Ed Tech Occupational Work Experience</td>
</tr>
<tr>
<td>EDT 50</td>
<td>Preparation for Online Learning</td>
</tr>
<tr>
<td>EDT 51</td>
<td>Email for Educators</td>
</tr>
<tr>
<td>EDT 52</td>
<td>Windows for Educators</td>
</tr>
<tr>
<td>EDT 53</td>
<td>Macintosh for Educators</td>
</tr>
<tr>
<td>EDT 57</td>
<td>Apple/Claris Works for Educators</td>
</tr>
<tr>
<td>EDT 67</td>
<td>Inspiration Presentations</td>
</tr>
<tr>
<td>EDT 68</td>
<td>Using KidPix</td>
</tr>
<tr>
<td>EDT 81</td>
<td>Videos for School Use</td>
</tr>
<tr>
<td>EDT 101</td>
<td>Creating Curriculum Projects Using the Internet</td>
</tr>
<tr>
<td>EDT 106</td>
<td>Access for Educators</td>
</tr>
<tr>
<td>EDT 107</td>
<td>Desktop Publishing for Educators</td>
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<td>EDT 108</td>
<td>Photoshop Elements for Educators</td>
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<tr>
<td>EDT 109</td>
<td>Developing Campus Based Portfolios</td>
</tr>
<tr>
<td>EDT 112</td>
<td>Virtual Curriculum</td>
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<tr>
<td>EDT 114</td>
<td>Microsoft Producer for Educators</td>
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<td>Hardware and Software Considerations for Educators</td>
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<td>Exploring Assistive Technology in Education</td>
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<td>EDT 121</td>
<td>Using Handheld Computers in Education</td>
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<tr>
<td>EDT 122</td>
<td>Fundraising/Grant Writing for Educators</td>
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<tr>
<td>EDT 123</td>
<td>Internet tools for Educators</td>
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<tr>
<td>EDT 132</td>
<td>Digital Music in the Classroom</td>
</tr>
<tr>
<td>EDT 137</td>
<td>iMovie/Movie Maker in Education</td>
</tr>
<tr>
<td>EDT 138</td>
<td>Teaching with Clay Animation</td>
</tr>
<tr>
<td>EDT 150</td>
<td>Podcasting in Education</td>
</tr>
<tr>
<td>ART 196</td>
<td>Introduction to Designing Web Graphics</td>
</tr>
</tbody>
</table>
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the major requirements for the Certificate of Achievement and all AA degree general education requirements for a total of at least 60 units. Although some of these courses are transferable, this certificate/AA Degree is nontransferable.

Please see counselor or the respective department for additional alternatives.

TELECONFERENCING PRACTITIONER CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS

You must complete 14 units in the following area:
Take the following:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>EDT 19</td>
<td>Fundamentals of Teleconferencing</td>
<td>1</td>
</tr>
<tr>
<td>EDT 20</td>
<td>Teleconferencing for Small Groups</td>
<td>1</td>
</tr>
<tr>
<td>EDT 21</td>
<td>Teleconference Telematic</td>
<td>1</td>
</tr>
<tr>
<td>EDT 22</td>
<td>Teleconference Event Review and Evaluation</td>
<td>1</td>
</tr>
<tr>
<td>EDT 23</td>
<td>Teleconference Production Studio</td>
<td>1</td>
</tr>
<tr>
<td>EDT 24</td>
<td>Teleconference Portfolio Workshop</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 119</td>
<td>Hardware and Software Considerations for Educators</td>
<td>1</td>
</tr>
<tr>
<td>EDT 125</td>
<td>Fundamentals of Online Teaching</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>Basic Computer Literacy</td>
<td>1</td>
</tr>
<tr>
<td>EDT 43</td>
<td>EdTech 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 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>
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</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>1</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 112</td>
<td>Virtual Curriculum</td>
<td>1</td>
</tr>
<tr>
<td>EDT 115</td>
<td>Technology Integration in Education</td>
<td>1</td>
</tr>
<tr>
<td>EDT 120</td>
<td>Exploring Assistive Technology in Education</td>
<td>1</td>
</tr>
<tr>
<td>ART 196</td>
<td>Introduction to Designing Web Graphics</td>
<td>1</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Computer Literacy</td>
<td>1</td>
</tr>
<tr>
<td>CIS 121</td>
<td>Introduction to Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>PHOT 112</td>
<td>Intermediate Digital Photography</td>
<td>3</td>
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</table>

TOTAL CERTIFICATE REQUIREMENT: 18

Additional Requirements--You must complete 4 units in the following area:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>EDT 106</td>
<td>Creating Curriculum Projects Using the Internet</td>
<td>1</td>
</tr>
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<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 112</td>
<td>Virtual Curriculum</td>
<td>1</td>
</tr>
<tr>
<td>EDT 115</td>
<td>Technology Integration in Education</td>
<td>1</td>
</tr>
<tr>
<td>EDT 120</td>
<td>Exploring Assistive Technology in Education</td>
<td>1</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>1.5</td>
</tr>
<tr>
<td>CIS 121</td>
<td>Introduction to Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>PHOT 112</td>
<td>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 AA 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**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</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 Lab</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 CERTIFICATE REQUIREMENTS:** 24

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

Complete requirements for a Certificate of Achievement in Electronics Technology. For an AA Degree, a student must also take the general education requirements to achieve a minimum of 60 units.

**RECOMMENDED ELECTIVES:** 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, health care industries and government agencies.

See Cerritos College Graduation Requirements.

**ELECTRONICS TECHNOLOGY CERTIFICATE OF ACHIEVEMENT**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
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</tr>
</thead>
<tbody>
<tr>
<td>EL 50</td>
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<tr>
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<tr>
<td>EL 120L</td>
<td>AC Electronics Laboratory</td>
<td>1</td>
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<tr>
<td>EL 134</td>
<td>Digital Circuits and Computer Logic</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>
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<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 requirements from a Certificate of Achievement in Electronics Technology. For an AA Degree, a student must also take the general education requirements to achieve a minimum of 60 units.

**RECOMMENDED ELECTIVES:** 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, health care industries and government agencies.

See Cerritos College Graduation Requirements.

**INDUSTRIAL ELECTRONICS TECHNOLOGY OPTION**

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</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>
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<tr>
<td>EL 110</td>
<td>Principles of DC Electronics</td>
<td>4</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 Logic</td>
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<td>EL 200L</td>
<td>Semiconductor Electronics Lab</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 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 industrial electronics technicians include the aerospace, automotive, transportation, computer, instrumentation, telecommunication, television broadcasting, entertainment, motion picture, process control, manufacturing, health care industries and government agencies.

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>DESCRIPTION</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>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</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>
</tbody>
</table>

**UNIT TOTAL**

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 College engineering counselor for the specific requirements of the school to optimize preparation for transfer. Visit www.assist.org for lower division major requirements for most California public universities.

BIOL 120 Introduction to Biological Science 4
BIOL 200 Principles of Biology 5
BIOL 201 Principles of Biology 5
BIOL 202 Molecular Biology/Genetics 4
CHEM 112 General Chemistry 5
CHEM 205 Quantitative Analysis Chemistry 4
CHEM 211 Organic Chemistry 5
CHEM 212 Organic Chemistry 5
CIS 178 Programming in Fortran 3
CIS 180 Programming in C/C++ 3
CIS 182 JAVA Programming 3.5
CIS 230 Assembly Programming for Microcomputers 4
CIS 280 Object-Oriented Programming in C++ 3
CIS 292 Data Structures 4
EL 134 Digital Circuits and Computer Logic 3
EL 134L Digital Circuits and Computer Logic Laboratory 1
ENGR 112 Engineering Graphics 3
ENGR 123 Descriptive Geometry 3
ENGR 215 Engineering Electric Circuits 3
ENGR 235 Statics 3
ENGT 131 Fundamentals of Design Including Autocad 3
ENGT 138 Fundamentals of Computer Aided Drafting 4
GEOL 101 The Earth Environment 4
MATH 112 Statistics 4
MATH 240 Calculus and Differential Equations 4
MECH 100 Manufacturing Processes 3
MICR 200 Principles and Applications of Microbiology 5
PHYS 203 Engineering Physics 4

California State University – Long Beach

California State University – Fullerton
(CSUF) 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 four options available: Electrical, Civil, Computer and Mechanical.

California State University – Los Angeles
(CSULA) Offers programs leading to the Bachelor of Science degree in Engineering with option in Civil, Electrical, and Mechanical Engineering.

California State Polytechnic University – Pomona
(CSUP) Engineering school departments: Aerospace, Chemical, Civil, Computer, Electrical, Industrial, Manufacturing, 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, Bioengineering, Chemical, Civil, Computer Science, Computer Science and Engineering, Electrical, Materials, and Mechanical.

University of California – Irvine
(UCI) Offers Bachelor’s Degree in the following: Biomedical, Chemical & Materials Science, Civil and Environmental, Electrical and Computer Science, Environmental, Materials Science, Mechanical and Aerospace.

University of California – Riverside
(UCR) Offers Bachelor’s Degree in the following: Chemical, Computer Science, Electrical, Environmental, Information Systems and Mechanical.

Loyola Marymount University
(LMU) Offers BS Degrees in: Civil Engineering, Civil with an Environmental Engineering emphasis, Electrical Engineering, Electrical with a Computer Engineering emphasis, Mechanical.

University Of Southern California

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 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.

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

ENGINEERING DESIGN TECHNOLOGY PROGRAMS
VERIFICATION OF COMPLETION/ENGINEERING DESIGN TECHNOLOGY

MACHINE DESIGN AND MANUFACTURING UNITS
ENGT 131 Design Fundamentals Including AutoCAD 3
ENGT 138 AutoCAD 4
ENGT 153 Machine Design with AutoCAD 3
ENGT 237 Graphical Statics and Strength of Materials 3
ENGT 258 Design and Production Technology with AutoCAD 4
3-D PARAMETRIC MODELING DESIGN AND PRESENTATIONS UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 117</td>
<td>Geometrical Dimensioning and Tolerancing</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 131</td>
<td>Design Fundamentals Including AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 138</td>
<td>AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 255</td>
<td>AutoDesk VIZ Rendering and Solid Modeling</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 259</td>
<td>SolidWorks</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL CERTIFICATE REQUIREMENT:</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

DESIGN WITH AUTODESK MAP 3-D UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 131</td>
<td>Design Fundamentals Including AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 138</td>
<td>AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 151</td>
<td>Advanced Applications of Computer Aided</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 160</td>
<td>AutoDesk MAP 3-D</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL CERTIFICATE REQUIREMENT:</strong></td>
<td><strong>38</strong></td>
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</table>

SHEET METAL LAYOUT APPLICATIONS WITH 3-D PARAMETRIC SOLID MODELING

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 131</td>
<td>Design Fundamentals Including AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 133</td>
<td>Sheet Metal Layout and Applications with Inventor</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 138</td>
<td>AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 256</td>
<td>Introduction to AutoDesk Mechanical Desktop</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 257</td>
<td>AutoDesk Inventor</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL CERTIFICATE REQUIREMENT:</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

ENGINEERING DESIGN AND PRODUCTION TECHNOLOGY

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 116</td>
<td>Blueprint Reading for Machine Trades</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 131</td>
<td>Design Fundamentals Including AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 138</td>
<td>AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 265</td>
<td>CATIA I</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 266</td>
<td>CATIA II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL CERTIFICATE REQUIREMENT:</strong></td>
<td><strong>55</strong></td>
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</tbody>
</table>

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 AA Degree general education requirements to achieve a minimum of 60 units.

RECOMMENDED ELECTIVES: MFGT 51, MFGT 100, MTT 100, BA 117, MATH 60, 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 MAJOR 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>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>
<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>
</tbody>
</table>

Foreign Language: Students intending to transfer to the University of California should discuss the foreign language requirement with a counselor.

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University-Dominguez Hills

Select one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 232</td>
<td>Readings in Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 233</td>
<td>Readings in the Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 234</td>
<td>Readings in Short Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 235</td>
<td>Readings in the Drama</td>
<td>3</td>
</tr>
</tbody>
</table>
California State University – Long Beach

Option in Literature: required lower-division courses.
ENGL 246A Survey of English Literature 3
ENGL 246B Survey of English Literature 3

Option in English Education: required lower division.
ENGL 246A Survey of English Literature 3
ENGL 246B Survey of English Literature 3
ENGL 230A Introduction to American Literature 3
or ENGL 230B Introduction to American Literature 3

(ENGL 240, Creative Writing is required of students planning to choose the creative writing option at CSULB.)

California State University – Los Angeles
ENGL 248A Masterpieces of World Literature 3
ENGL 246A Survey of English Literature 3
ENGL 246B Survey of English Literature 3

University of California – Berkeley
ENGL 246A Survey of English Literature 3
ENGL 228 Shakespeare’s Plays 3

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 (6 units) from the following:
ENGL 230A Introduction to American Literature (3)
or ENGL 230B Introduction to American Literature (3)
and ENGL 232 Readings in Poetry (3)
and ENGL 233 Readings in the Novel (3)
or ENGL 235 Readings in the Drama (3)
or ENGL 246A Survey of English Literature (3)
or ENGL 246B Survey of English Literature (3)
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 246A Survey of English Literature 3
or 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 wwwassist.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 VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS: UNITS

Choose 6 units from the following courses, each repeatable 2 times:
ENGL 240 Creative Writing 3
ENGL 241 Screenwriting 3
or TH 241 Screenwriting 3

Choose 6 units from the following courses:
ENGL 227 Readings in Current Literature 3
ENGL 228 Shakespeare’s Plays 3
ENGL 232 Readings in Poetry 3
ENGL 233 Readings in the Novel 3
ENGL 234 Readings in Short Fiction 3
ENGL 235 Readings in the Drama 3

TOTAL VERIFICATION OF COMPLETION REQUIREMENTS: 12

All course work required for the verification must be completed with a minimum grade of “C.”

EXERCISE SCIENCE – SEE PHYSICAL EDUCATION

FAMILY AND CONSUMER SCIENCE

CAREER PATHWAY

(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:
• Child Development and Family Studies
• Consumer Affairs
• Family and Consumer Sciences Education
• Family Life Education
• Fashion Merchandising
• Textiles and Clothing
• A Bachelor of Science in Dietetics and Food Administration

with options in Food Science, Hospitality Foodservice and Hotel Management, and Nutrition and Dietetics 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 MAJOR PREPARATION
California State University – Long Beach

CHILD DEVELOPMENT & FAMILY STUDIES OPTION

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 120</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
<td>(4)</td>
</tr>
<tr>
<td>or A&amp;P 200</td>
<td>Human Anatomy</td>
<td>(5)</td>
</tr>
<tr>
<td>or 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>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 ANTH 100</td>
<td>Cultural Anthropology</td>
<td>(3)</td>
</tr>
<tr>
<td>CD 110</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CDIT 151</td>
<td>Infant and Toddler Development</td>
<td>3</td>
</tr>
<tr>
<td>and CDIT 152</td>
<td>Infant and Toddler Programs</td>
<td>3</td>
</tr>
<tr>
<td>HO 152</td>
<td>Normal &amp; Therapeutic Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus 9 units of CSULB advisor approved electives.

Consumer Affairs Option

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</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>PSY 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>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 210</td>
<td>Elementary Statistics</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Plus 9 units of CSULB advisor approved electives.

Family and Consumer Sciences Education Option

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>CHEM 100</td>
<td>Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
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<tr>
<td>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 Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CD 110</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>HO 152</td>
<td>Normal &amp; Therapeutic Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CA 101</td>
<td>Introduction to Food Service, Safety and Sanitation</td>
<td>1</td>
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</table>

Fashion Design, Manufacturing and Merchandising concentration:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
</tr>
</tbody>
</table>

Family Life Education Option

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>(3)</td>
</tr>
<tr>
<td>A&amp;P 120</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or 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>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CD 110</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>HO 152</td>
<td>Normal and Therapeutic Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus 9 units of CSULB advisor approved electives.

Fashion Merchandise Option

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of Accounting I</td>
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<tr>
<td>CHEM 100</td>
<td>Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>or 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 of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or A&amp;P 201</td>
<td>Human Physiology</td>
<td>(5)</td>
</tr>
<tr>
<td>or A&amp;P 151</td>
<td>Introduction to Human Physiology</td>
<td>(4)</td>
</tr>
<tr>
<td>or A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HO 152</td>
<td>Normal and Therapeutic Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 210</td>
<td>Elementary Statistics</td>
<td>(4)</td>
</tr>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 102</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introduction Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>(3)</td>
</tr>
<tr>
<td>SPCH 100</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>or SPCH 120</td>
<td>Fundamental of Interpersonal Communication</td>
<td>(3)</td>
</tr>
</tbody>
</table>

ECON 202 | Principles | 3 |
HIST 241 | Western Civilization | 3 |
or ART 101 | Art History I: Prehistory to Gothic | (3) |
CIS 101 | Introduction to Computer Information | 3 |
PSYC 101 | General Introductory Psychology | 3 |
SOC 101 | Introductory Sociology Principles | 3 |
or SOC 201 | Social Problems | (3) |
or ANTH 100 | Cultural Anthropology | (3) |
ART 186 | Computer Graphics in Art & Design | 3

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>or 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>
</tbody>
</table>
or ART 101 | Art History I: Prehistory to Gothic | (3) |
SOC 101 | Introductory Sociology | 3 |
or SOC 201 | Social Problems | (3) |
or ANTH 100 | Cultural Anthropology | (3) |
ART 186 | Computer Graphics in Art & Design | 3

BACHELOR OF SCIENCE IN DIETETICS AND FOOD ADMINISTRATION

Food Science Option

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>A&amp;P 151</td>
<td>Introduction to Human Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>
or A&P 201 | Human Physiology | (5) |
| CHEM 111 | General Chemistry | 5 |
| CHEM 112 | General Chemistry | 5 |
| CIS 101 | Introduction to Computer Information Systems | 3 |
| HO 152 | Normal and Therapeutic Nutrition | 3 |
| MATH 116 | Calculus for Managerial, Biological and Social Sciences | 4 |
| MICRO 200 | Principles and Applications of Microbiology | 5 |
| PHYS 101 | General Physics | 4 |
| PSYC 101 | General Introduction Psychology | 3 |
or SOC 101 | Introductory Sociology Principles | (3) |
| SPCH 100 | Fundamentals of Oral Communication | 3 |
or SPCH 120 | Fundamental of Interpersonal Communication | (3) |

Hospitality Foodservice and Hotel Management Option

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>A&amp;P 120</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>
or A&P 151 | Introduction to Human Physiology | (4) |
or A&P 201 | Human Physiology | (5) |
| ACCT 101 | Fundamentals of Accounting I | 4 |
| CA 101 | Introduction to Food Service, Safety & Sanitation | 1 |
| CHEM 100 | Introductory Chemistry | 4 |
or CHEM 111 | General Chemistry | (5) |
| ECON 201 | Principles of Macroeconomics | 3 |
| ECON 202 | Principles of Microeconomics | 3 |
| HO 152 | Normal and Therapeutic Nutrition | 3 |
| MATH 112 | Elementary Statistics | 4 |
or PSYC 210 | Elementary Statistics | (4) |
| CIS 101 | Introduction to Computer Information Systems | 3 |
| PHIL 102 | Introduction to Ethics | 3 |
| PSYC 101 | General Introduction Psychology | 3 |
or SOC 101 | Introductory Sociology Principles | (3) |
| SPCH 100 | Fundamentals of Oral Communication | 3 |
or SPCH 120 | Fundamental of Interpersonal Communication | (3) |
### Curricula, Requirements for Majors, Certificates and Transfer Programs

**Nutrition and Dietetics Option**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</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>HO 152</td>
<td>Normal and Therapeutic Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MICRO 200</td>
<td>Principles and Applications of Microbiology</td>
<td>3</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>SPCH 100</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>or SPCH 120</td>
<td>Fundamental of Interpersonal Communication</td>
<td>(3)</td>
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</table>

**FORESTRY TRANSFER PROGRAM**

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

<table>
<thead>
<tr>
<th>Institution</th>
<th>Course(s)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Humboldt</td>
<td>BIOL 200 Principles of Biology</td>
<td>5</td>
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<tr>
<td></td>
<td>BIOL 201 Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>CHEM 110 Elementary Chemistry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 116 Calculus for Managerial, Biological, and Social Sciences</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Forestry Hydrology Option:</td>
<td>GEOL 101 The Earth Environment</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 101 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 201 Engineering Physics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHYS 202 Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHYS 203 Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 105 Man and Environment</td>
<td>3</td>
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<tr>
<td>University of California – Berkeley</td>
<td>BIOL 200 Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>CHEM 211 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>CHEM 212 Organic Chemistry</td>
<td>5</td>
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<tr>
<td></td>
<td>ECON 201 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 202 Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGL 100 Freshman Composition</td>
<td>4</td>
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<tr>
<td></td>
<td>ENGL 102 Freshman Composition and Literature</td>
<td>3</td>
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<td></td>
<td>ENGL 246A Survey of English Literature</td>
<td>3</td>
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<tr>
<td>or ENGL 246B Survey of English Literature</td>
<td>3</td>
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</tr>
<tr>
<td></td>
<td>GEOL 101 The Earth Environment</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 112 Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MATH 190 Analytic Geometry and Calculus II</td>
<td>4</td>
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**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 AA 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 Ceritos College Graduation Requirements.

See California State University General Education List.

**FRENCH TRANSFER PROGRAM**

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

<table>
<thead>
<tr>
<th>Institution</th>
<th>Course(s)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Fullerton</td>
<td>FREN 101 Elementary French</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>FREN 102 Elementary French</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>FREN 201 Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>FREN 202 Intermediate French</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>FREN 203 Intermediate French, Advanced Level I</td>
<td>4</td>
</tr>
<tr>
<td>California State University – Los Angeles</td>
<td>FREN 101 Elementary French</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>FREN 102 Elementary French</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>FREN 201 Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td>and FREN 201 Intermediate French</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FREN 281 Beginning Conversational French</td>
<td>3</td>
</tr>
</tbody>
</table>

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 the prerequisite for their writing proficiency requirement.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Course(s)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Long Beach</td>
<td>FREN 101 Elementary French</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>FREN 102 Elementary French</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>FREN 201 Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td>and FREN 201 Intermediate French</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FREN 281 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**

This major does not require completion of prerequisites for admission as a transfer student.

<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>and 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>and FREN 202</td>
<td>Intermediate French</td>
<td>4</td>
</tr>
</tbody>
</table>
At least one course is required from four different areas (writing, literature, history, and philosophy). An approved list of courses is available on 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. See college placement examination policy. French Literature and French Civilization options are also available in this major. See a counselor for further clarification.

**University of California – Los Angeles**
For information regarding preparation for this major, visit www.french.ucla.edu/programs/undergrade_prog.htm. Also, see a counselor for specific information.

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**
(1) Meet the above requirements as listed for a state university and any electives needed to reach 18 units in the major. (2) complete the AA Degree general education requirements, and (3) take electives to achieve a minimum of 60 units.

**CAREER OPPORTUNITIES:** Employment with 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 MAJOR PREPARATION FOR CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA**

**UNITS**
- GEOG 101 Physical Geography 3
- GEOG 102 Cultural Geography 3

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

**California State University – Fullerton**
- GEOG 105 World Regional Geography 3

**California State University – Long Beach**
- GEOG 105 World Regional Geography 3

**California State University – Los Angeles**
- GEOG 106 Introduction to Geographic Information Systems 3
- ENGL 103* Critical and Argumentative Writing 3

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

**University of California – Los Angeles**
- GEOG 102+ Cultural Geography 3
- or GEOG 105+ World Regional Geography 3
- MATH 112+ Elementary Statistics 4

+Recommend major preparation for UCLA.

**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:** Employment in business, regional, urban, and environmental planning, government, foreign service, teaching.

See Cerritos College Graduation Requirements.
See State University General Education List.
Curricula, Requirements for Majors, Certificates and Transfer Programs

Physical Science Option:
- GEOL 201 Earth History 4
- MATH 170 Analytical Geometry and Calculus I 4
- MATH 190 Analytical Geometry and Calculus II 4
- PHYS 201 Engineering Physics 4
  and PHYS 202 Engineering Physics 4
  and PHYS 203 Engineering Physics 4

California State University – Fullerton (Geological Science)
- GEOL 201 Earth History 4
- 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
  and PHYS 202 Engineering Physics 4
  or PHYS 101 General Physics (4)
  and PHYS 102 General Physics (4)

One additional course (with approval of CSUF advisor):

LOWER DIVISION SELECTION
- BIOL 201 Principles of Biology 5
- A&P 120 Introduction to Human Anatomy and Physiology 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
- GEOL 101 Physical Geology 4
  or ESCI 110 Introduction to Earth 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
- BIOL 120 Introduction to Biological Science 4

Additional required course for the various emphases: Petroleum Geology, Geochemistry/Mineralogy-Petrology, Structural Geology/Tectonics.

California State University – Los Angeles
- ENGL 103 Critical and Argumentative Writing 3

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

- GEOL 201 Earth History 4
- MATH 170 Analytic Geometry and Calculus I 4
- PHYS 101 General Physics 4
  and PHYS 102 General Physics 4

California State Polytechnic University – Pomona
- 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
- BIOL 120 Introduction to Biological Science 4
- GEOL 201 Earth History 4

COMMON LOWER DIVISION PREPARATION FOR THE UNIVERSITY OF CALIFORNIA

University of California – Los Angeles
- BIOL 200 Principles of Biology 5
- CIS 178 Programming in Fortran 3
  or CIS 180 Programming in C/C++ (3)
- MATH 170 Analytic Geometry and Calculus I 4
- MATH 190 Analytic Geometry and Calculus II 4
- MATH 220 Analytic Geometry and Calculus III 4
- PHYS 201 Engineering Physics 4
- PHYS 202 Engineering Physics 4
- PHYS 203 Engineering Physics 4

Geology/Engineering Geology Option
- MATH 240 Calculus and Differential Equations 4

Geology/Paleobiology Option
- BIOL 201 Principles of Biology 5
- BIOL 202 Molecular Biology/Genetics 4
- CHEM 211 Organic Chemistry 5
- PHYS 201 Engineering Physics 4
- PHYS 202 Engineering Physics 4

University of California – Riverside

General Geology, Geobiology, and Geophysics Options
- BIOL 201 Principles of Biology 5
- GEOL 101 Physical Geology 4
- GEOL 201 Earth History 4
- GEOG 101 Physical Geography 3
- GEOG 101L Physical Geography 1
- 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

Biogeography Option
- BIOL 200 Principles of Biology 5
  or BOT 120 Introduction to Plant Science (4)
  and ZOOL 120 Introduction to Animal Biology (4)
- BOT 120 Introduction to Plant Science 4
- ZOOL 120 Introduction to Animal Biology 4

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

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

<table>
<thead>
<tr>
<th>California State University – Fullerton</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 101 Elementary German</td>
<td>5</td>
</tr>
<tr>
<td>GERM 102 Elementary German</td>
<td>5</td>
</tr>
<tr>
<td>GERM 201 Intermediate German</td>
<td>4</td>
</tr>
<tr>
<td>GERM 202 Intermediate German</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>California State University – Long Beach</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 101 Elementary German</td>
<td>5</td>
</tr>
<tr>
<td>GERM 102 Elementary German</td>
<td>5</td>
</tr>
<tr>
<td>GERM 201 Intermediate German</td>
<td>4</td>
</tr>
<tr>
<td>GERM 202 Intermediate German</td>
<td>4</td>
</tr>
</tbody>
</table>

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

This major does not require the completion of certain prerequisites for admission as a transfer student.

| GERM 101 Elementary German              | 5     |
| GERM 102 Elementary German              | 5     |
| GERM 201 Intermediate German            | 4     |
| 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 – Los Angeles

UCLA offers German as a major although no formal articulation exists. Students are recommended to complete two years of college-level German prior to admission.

University of California – Riverside

Completion of the course work listed below is not mandatory for admission into this major. However, students are advised to complete as much lower-division course preparation as possible prior to transfer, to be ready for upper division course work.

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 examination and should consult with their advisors. No college-level credit may be duplicated. See college placement examination policy.

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 AA 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

| HIST 102 Political & Social History of the United States: 1500’s to 1876 | 3     |
| HIST 103 Political & Social History of the United States: 1877 to Present | 3     |

ADDITIONAL LOWER DIVISION REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills

HIST 245 World Civilization from Antiquity to 1500 3
HIST 246 World Civilization from 1500 to Present 3
HIST 102 and 103 are not required.

California State University – Fullerton

HIST 102 Political and Social History of the United States: 1500’s to 1876 3
and HIST 103 Political and Social History of the United States: 1877 to Present 3
or HIST 102 Political and Social History of the United States: 1500’s to 1876 3
and HIST 101 American History and Constitution 3
HIST 245 World Civilization from Antiquity to 1500 3
Curricula, Requirements for Majors, Certificates and Transfer Programs

California State University – Los Angeles

ENGL 103 Critical and Argumentative Writing 3
HIST 102 Political and Social History of the United States: 1500’s to 1876 3
and HIST 103 Political and Social History of the United States: 1877 to Present 3
HIST 245 World Civilization from Antiquity to 1500 3
and HIST 246 World Civilization from 1500 to Present 3

History majors are urged to develop competence in at least one foreign language.

California State University – Long Beach

HIST 102 Political and Social History of the United States: 1500’s to 1876 3
HIST 103 Political and Social History of the United States: 1877 to Present 3
HIST 241 Western Civilization 3
HIST 242 Western Civilization 3
HIST 245 World Civilization from Antiquity to 1500 3
HIST 246 World Civilization from 1500 to Present 3

University of California – Irvine

HIST 102 Political and Social History of the United States: 1500’s to 1876 3
and HIST 103 Political and Social History of the United States: 1877 to Present 3
or HIST 241 Western Civilization 3
and HIST 242 Western Civilization 3
or HIST 260 Survey of the History of Asia 3
and HIST 265 Selected Problems in Contemporary Asian History 3
PHIL 100 Introduction to Philosophy 3
or PHIL 102 Introduction to Ethics 3
or PHIL 201 Introduction to 20th Century Philosophy 3

Up to three additional UC transferable history courses.

University of California – Long Beach

HIST 241 Western Civilization 3
and HIST 242 Western Civilization 3
and HIST 245 World Civilization from Antiquity to 1500 3
and HIST 246 World Civilization from 1500 to Present 3

University of California – Irvine

HIST 241 Western Civilization 3
or HIST 242 Western Civilization 3
or HIST 245 World Civilization from Antiquity to 1500 3
or HIST 246 World Civilization from 1500 to Present 3

University of California – Riverside

HIST 245 World Civilization from Antiquity to 1500 3
or HIST 246 Western Civilization (3)

One additional UC transferable history course. HIST 102 and HIST 103 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

UNITS
AUTO 100 Automotive Maintenance and Operation 4
EL 110 Principles of DC Electronics 3
EL 110L DC Electronics Laboratory 1
ENGT 131 Fundamentals of Design including AutoCAD 3
ENGT 257 AutoDesk Inventor 4
ENGT 258 Design and Production Technology with AutoCAD 4
MTT 100 Machine Tool Introduction 2
or WELD 100 Welding Fundamentals (2.5)
PHOT 100 Introductory Photography 3
WMT 101 Introduction to Woodworking 2

California State University – Los Angeles Requirement:
ENGL 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 BS 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ARCH 111</td>
<td>Architectural Drafting and Design I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Pre-Calculus Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
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<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 REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Long Beach (Construction Engineering Management)
ACCT 101 Fundamentals of Accounting I 4
or ACCT 240 Cost Accounting (4)
CIS 101 Introduction to Computer and Information Systems 3
ENGT 237 Graphical Statics and Strength of Materials 3
or ENGR 235 Statics (3)
MATH 112 Elementary Statistics 4
MATH 170 Calculus I 4

California State University – Northridge (Construction Management Technology)
ACCT 101 Fundamentals of Accounting 4
CIS 101 Introduction to CIS 3
ECON 202 Microeconomics 3
GEOL 101 The Earth Environment 4
LAW 111 Business Law 3
MATH 114 College Algebra 4
MATH 170 Calculus I 4
MATH 190 Calculus II 4

California State Polytechnic University – Pomona (Construction Management Technology)
ARCH 121 Architectural Drafting and Design II 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 (ENGINEERING TECHNOLOGY)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ECON 201</td>
<td>Macroeconomics</td>
<td>3</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 Logic</td>
<td>3</td>
</tr>
<tr>
<td>EL 134L</td>
<td>Digital Circuits and Computer Logic Laboratory</td>
<td>1</td>
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<tr>
<td>MATH 150</td>
<td>Precalculus Mathematics</td>
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<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
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<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 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 Electronics 3
EL 200L Semi-Conductor Electronics Laboratory 1
ENGT 131 Fundamentals of Design Including AutoCAD 3
MATH 112 Elementary Statistics 4
MATH 170 Calculus I 4

California State Polytechnic University – Pomona
CHEM 111 General Chemistry 5
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, 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 – MANUFACTURING OPTION TRANSFER PROGRAM

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY (ENGINEERING TECHNOLOGY)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 131</td>
<td>Fundamentals of Drafting Including AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Pre-Calculus Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 106</td>
<td>Introduction Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
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<tr>
<td>PHYS 102</td>
<td>General Physics</td>
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</tbody>
</table>

ADDITIONAL LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Long Beach

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 138</td>
<td>AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 153</td>
<td>Machine Design with AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 237</td>
<td>Graphical Statics and Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>or ENGR 235</td>
<td>Statics</td>
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<tr>
<td>ENGT 258</td>
<td>Design and Production Technology with AutoCAD</td>
<td>4</td>
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<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>MTT 100</td>
<td>Machine Tool Introduction</td>
<td>2</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 210</td>
<td>Elementary Statistics</td>
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California State Polytechnic University – Pomona (GENERAL)

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<tr>
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<th>Title</th>
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</thead>
<tbody>
<tr>
<td>WELD 100</td>
<td>Welding Fundamentals</td>
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</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
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</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>ENGT 131</td>
<td>Fundamentals of Design Including AutoCAD</td>
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<td>ENGT 237</td>
<td>Graphical Statics and Strength of Materials</td>
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<td>or ENGR 235</td>
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<td>(3)</td>
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<tr>
<td>LAW 111</td>
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</tr>
<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
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<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
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</tbody>
</table>

Quality Control Courses

<table>
<thead>
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<th>Units</th>
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<tbody>
<tr>
<td>MTT 100</td>
<td>Machine Tool Introduction</td>
<td>2</td>
</tr>
</tbody>
</table>

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 industry and service industry.

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

Other California State University and Colleges 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: 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 General Education List.
INDUSTRIAL TECHNOLOGY – AUTOMATED MANUFACTURING
CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTT 100</td>
<td>Machine Tool Introduction</td>
<td>2</td>
</tr>
<tr>
<td>MTT 170</td>
<td>Computer Numerical Control Programming</td>
<td>2.5</td>
</tr>
<tr>
<td>PMT 66</td>
<td>Hydraulics and Pneumatics</td>
<td>3</td>
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<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>
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</tbody>
</table>

TOTAL UNITS 11.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS
Complete 60 units to include (1) the Certificate of Achievement requirements, (2) ENGT 138, (3) the Associate in Arts Degree general education requirements, and (4) electives as needed.
RECOMMENDED ELECTIVES: PHYS 101

INTERNATIONAL STUDIES PROGRAM

GLOBAL STUDIES
ASSOCIATE IN ARTS DEGREE PROGRAM

CORE REQUIREMENTS (15 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
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</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>HIST 275</td>
<td>Global Studies</td>
<td>3</td>
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<tr>
<td>POL 210</td>
<td>International Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Division Requirements – Choose one option (9 units)

Political-Economic Option – Select three courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ECON 102</td>
<td>Women in the Global Economy</td>
<td>3</td>
</tr>
<tr>
<td>HIST 246</td>
<td>World Civilization</td>
<td>3</td>
</tr>
<tr>
<td>POL 202</td>
<td>Comparative Government</td>
<td>3</td>
</tr>
<tr>
<td>POL 230</td>
<td>Contemporary Political Issues: Middle East</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>International Business</td>
<td>3</td>
</tr>
</tbody>
</table>

Socio-Cultural Option: Select three courses

<table>
<thead>
<tr>
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<th>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHIL 200</td>
<td>World Religions</td>
<td>3</td>
</tr>
<tr>
<td>HUM 100</td>
<td>The Art of Being Human</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 170</td>
<td>Introduction to Language and Culture</td>
<td>3</td>
</tr>
<tr>
<td>SOC 215</td>
<td>Sociology of Cultural Diversity</td>
<td>3</td>
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<tr>
<td>SPCH 110</td>
<td>Intercultural Communication</td>
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NOTE: One year of Foreign Language study is recommended

GLOBAL STUDIES
CERTIFICATE OF ACHIEVEMENT

CORE REQUIREMENTS

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<tr>
<th>Course</th>
<th>Description</th>
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<tr>
<td>GEOG 105</td>
<td>World Regional Geography</td>
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</tr>
<tr>
<td>POL 210</td>
<td>International Relations</td>
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<tr>
<td>BA 101</td>
<td>International Business</td>
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</tbody>
</table>

DIVISION OPTION REQUIREMENTS (SELECT 1) 9 UNITS

TOTAL CERTIFICATE UNITS 24

GLOBAL RESOURCES
CERTIFICATE OF ACHIEVEMENT

CORE REQUIREMENTS (CERTIFICATE OF COMPLETION)

<table>
<thead>
<tr>
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<th>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>GEOG 105</td>
<td>World Regional Geography</td>
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</tr>
<tr>
<td>POL 210</td>
<td>International Relations</td>
<td>3</td>
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<tr>
<td>BA 101</td>
<td>International Business</td>
<td>3</td>
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</table>

AND ONE OF THE FOLLOWING

<table>
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<tr>
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<th>Description</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHIL 200</td>
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<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

Division Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 106</td>
<td>Introduction to Language Study</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 101</td>
<td>Physical Ecology</td>
<td>3</td>
</tr>
</tbody>
</table>

SELECT 6 UNITS FROM THE FOLLOWING:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 101</td>
<td>Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>Natural and Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 110</td>
<td>Introduction to Geology</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 102</td>
<td>Physical Ecology Field Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ESCI 104</td>
<td>Oceanography</td>
<td>3</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 105</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>POL 210</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>International Business</td>
<td>3</td>
</tr>
</tbody>
</table>

AND ONE OF THE FOLLOWING:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 200</td>
<td>World Religions</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

Division Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 106</td>
<td>Introduction to Language Study</td>
<td>3</td>
</tr>
</tbody>
</table>
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
AND SPAN 202 Intermediate Spanish 4
or SPAN 112 Elementary Spanish for Spanish Speakers (5)
and SPAN 202 Intermediate Spanish 4
or SPAN 213 Living Spanish Grammar and Written Communication (2)
SPAN 214 Living Spanish Grammar and Written Communication (2)
and SPAN 202 Intermediate Spanish 4

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.

CONTEMPORARY WORLD CULTURES

CERTIFICATE OF ACHIEVEMENT

CORE REQUIREMENTS

GEOG 105 World Regional Geography 3
PHIL 104 Philosophy of Cultural Diversity: Challenge and Change 3
ANTH 100 Cultural Anthropology 3
SPCH 110 Intercultural Communication 3
SOC 215 Sociology of Cultural Diversity: Challenge and Changes 3

ANY ONE OF THE FOLLOWING:

HIST 246 World Civilization from 1500 to Present 3
POL 210 International Relations 3
PHIL 200 World Relations 3

TOTAL CERTIFICATE REQUIREMENTS 18

NOTE: Second Language Coursework is recommended.

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

TOTAL OF 29 UNITS

CORE REQUIREMENTS (9 UNITS)

JOUR 100 Mass Communication and Society 3
JOUR 101 Beginning Newswriting and Reporting 3
JOUR 121 Multimedia Reporting 3

Department Requirements

(6 units, any combinations each course may be taken twice)

JOUR 103 Newspaper Article Writing 2 (4)
JOUR 105 Newspaper Production 2 (4)
JOUR 106 talonmarks.com 1 (2)
JOUR 160L College Magazine Production 1 (2)

Additional Requirements (14 units)

ART 188 Design for Desktop Publishing 3
ART 194 Multimedia Design 3
ART 196 Introduction to Designing Web Graphics 3
CIS 205 Programming to HTML for the World Wide Web 1.5
JOUR 110 Broadcast News/Webcasting 1
or RTV 110 Broadcast News/Webcasting (1)
JOUR 111 Introduction to Newsletters 1
JOUR 112 Copy Editing Skills 1
JOUR 121 Multimedia Storytelling (second completion) 3
JOUR 122 Creating Podcasts for Media 1
JOUR 130 Photo Journalism 3
or PHOT 130 Photo Journalism (3)
JOUR 157 Principles of Public Relations 3
or BA 157 Principles of Public Relations (3)
JOUR 170 Broadcast News/Webcasting 1
or RTV 170 Broadcast News/Webcasting (1)
JOUR 201 Advanced Reporting and Editing 3
JOUR 220 Feature Article Writing 3
JOUR 298 Directed Studies in Journalism (may be applied twice) 1 (2)
or JOUR 50L Editorial Board (may be applied twice) (1) (2)
JOUR 299 Directed Studies in Journalism (must be a media internship) 2
or JOUR 170 Work Experience in Journalism (must be in media internship)
PHOT 100 Introductory Photography 3
PHOT 110 Introduction to Digital Images 3
SPCH 160 Parliamentary Procedure 1

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

#### TOTAL OF 38 UNITS

**CORE REQUIREMENTS: (9 UNITS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 100</td>
<td>Mass Communications and Society</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 101</td>
<td>Beginning Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 121</td>
<td>Multimedia Reporting</td>
<td>3</td>
</tr>
</tbody>
</table>

**Department Requirements**

(8 units, any combinations each course may be taken twice)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 50L</td>
<td>Editorial Board</td>
<td>1 (2)</td>
</tr>
<tr>
<td>JOUR 103</td>
<td>Newspaper Article Writing</td>
<td>2 (4)</td>
</tr>
<tr>
<td>JOUR 105</td>
<td>Newspaper Production</td>
<td>2 (4)</td>
</tr>
<tr>
<td>JOUR 106</td>
<td>talonmarks.com</td>
<td>1 (2)</td>
</tr>
<tr>
<td>JOUR 160L</td>
<td>College Magazine Production</td>
<td>1 (2)</td>
</tr>
</tbody>
</table>

**Additional requirements (21 units)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 188</td>
<td>Design for Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>ART 194</td>
<td>Multimedia Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 196</td>
<td>Introduction to Designing Web Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 205</td>
<td>Programming to HTML for the World Wide Web</td>
<td>1.5</td>
</tr>
<tr>
<td>JOUR 50L</td>
<td>Editorial Board (second or third completion)</td>
<td>1</td>
</tr>
<tr>
<td>JOUR 103</td>
<td>Newspaper Article Writing (third completion)</td>
<td>2</td>
</tr>
<tr>
<td>JOUR 106</td>
<td>Newspaper Production (third completion)</td>
<td>2</td>
</tr>
<tr>
<td>JOUR 106</td>
<td>talonmarks.com (second or third completion)</td>
<td>1</td>
</tr>
<tr>
<td>JOUR 110</td>
<td>Broadcast News</td>
<td>1</td>
</tr>
<tr>
<td>or RTV 110</td>
<td>Broadcast News</td>
<td>1 (1)</td>
</tr>
<tr>
<td>JOUR 111</td>
<td>Introduction to Newsletters</td>
<td>1</td>
</tr>
<tr>
<td>JOUR 112</td>
<td>Copy Editing Skills</td>
<td>1</td>
</tr>
<tr>
<td>JOUR 121</td>
<td>Multimedia Reporting (second completion)</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 121</td>
<td>Multimedia Reporting (second completion)</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 130</td>
<td>Photo Journalism</td>
<td>3</td>
</tr>
<tr>
<td>or PHOT 130</td>
<td>Photo Journalism</td>
<td>(3)</td>
</tr>
<tr>
<td>JOUR 157</td>
<td>Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>or BA 157</td>
<td>Principles of Public Relations</td>
<td>(3)</td>
</tr>
<tr>
<td>JOUR 170</td>
<td>Broadcast News/Webcasting</td>
<td>1</td>
</tr>
<tr>
<td>or RTV 170</td>
<td>Broadcast News/Webcasting</td>
<td>1 (1)</td>
</tr>
<tr>
<td>JOUR 201</td>
<td>Advanced Reporting and Editing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 220</td>
<td>Feature Article Writing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 298</td>
<td>Directed Studies in Journalism (may be applied twice)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>or JOUR 50L</td>
<td>Editorial Board (may be applied twice)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>JOUR 299</td>
<td>Directed Studies (must be a media internship)</td>
<td>2</td>
</tr>
<tr>
<td>or JOUR 170</td>
<td>Work Experience (must be a media internship)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>PHOT 100</td>
<td>Introductory Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 110</td>
<td>Introduction to Digital Images</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 160</td>
<td>Parliamentary Procedure</td>
<td>1</td>
</tr>
</tbody>
</table>

**Plus three units of the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 120</td>
<td>Internet for Journalists</td>
<td>2</td>
</tr>
<tr>
<td>JOUR 170</td>
<td>Broadcast News</td>
<td>1</td>
</tr>
<tr>
<td>SPCH 100</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 140</td>
<td>Oral Interpretation of Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 240</td>
<td>Oral Interpretation – Reader’s Theater</td>
<td>3</td>
</tr>
<tr>
<td>TH 108</td>
<td>Improvisation for Theater</td>
<td>3</td>
</tr>
<tr>
<td>TH 117</td>
<td>Stand-Up Comedy</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
</tr>
</tbody>
</table>

*May be taken a maximum of 2 times may be applied.

### RADIO/TELEVISION BROADCAST ANNOUNCING VERIFICATION OF COMPLETION

This verification 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-part verification combination that will begin to prepare the student for an Associate Arts in degree Broadcast Media. (See JOUR 141 – Broadcast Journalism)

**Radio/Television Broadcast Announcing**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTV 152</td>
<td>Introduction to Broadcasting</td>
<td>3</td>
</tr>
<tr>
<td>RTV 155</td>
<td>Radio Production</td>
<td>3</td>
</tr>
<tr>
<td>TH 156</td>
<td>Television Production</td>
<td>2.5</td>
</tr>
<tr>
<td>JOUR 122</td>
<td>Creating Podcasts for Media</td>
<td>1</td>
</tr>
<tr>
<td>JOUR 170</td>
<td>Broadcast News/Webcasting</td>
<td>1</td>
</tr>
<tr>
<td>or RTV 170</td>
<td>Broadcast News/Webcasting</td>
<td>1</td>
</tr>
<tr>
<td>SPCH 271</td>
<td>Voice and Articulation</td>
<td>3</td>
</tr>
<tr>
<td>RTV 298</td>
<td>Directed Studies in Radio-TV*</td>
<td>1</td>
</tr>
<tr>
<td>or RTV 171</td>
<td>Occupational Work Experience in Radio-TV*</td>
<td>1</td>
</tr>
</tbody>
</table>

*Should be a broadcasting-related internship

### ONLINE JOURNALISM VERIFICATION OF COMPLETION

The verification helps the student focus on the study of and preparation for entry level employment in the growing field of online journalism. The verification should be particularly helpful to those who will be helping small publications start online news ventures.

**Online Journalism Verification Requirements - 17**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 100</td>
<td>Mass Communications and Society</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 101</td>
<td>Beginning Newswriting and Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 120</td>
<td>Internet for Journalists</td>
<td>2</td>
</tr>
<tr>
<td>PHOT 110</td>
<td>Introduction to Digital Imaging</td>
<td>3</td>
</tr>
<tr>
<td>or ART 192</td>
<td>Photoshop/Digital Imaging</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus one unit from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 298</td>
<td>Directed Studies</td>
<td>1</td>
</tr>
<tr>
<td>or JOUR 50L</td>
<td>Editorial Board</td>
<td>1</td>
</tr>
</tbody>
</table>
Curricula, Requirements for Majors, Certificates and Transfer Programs

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

VERIFICATION OF COMPLETION

The verification helps the student focus on the study of and preparation for entry level employment in the field of photojournalism. The verification should be particularly helpful to those looking for employment at newspapers, magazines, corporate and government public relations departments and online journalism ventures.

PhotoJournalism Verification 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 ACCT 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
- JOUR 299 Directed Studies (internship–maximum 2 units) 2
- 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

OCCUPATIONAL PREPAREDNESS IN DESKTOP PUBLISHING/JOURNALISM

VERIFICATION OF COMPLETION

This verification will provide the student with the entry-level skills needed to write and prepare for printing such widely produced documents and newsletters, brochures, and news releases. These skills are applicable in a wide variety of business environments.

FINE ART DESKTOP PUBLISHING/JOURNALISM

VERIFICATION REQUIREMENTS – 14 UNITS

Select 11 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 188</td>
<td>Design for Desktop Publishing</td>
</tr>
<tr>
<td>ART 192</td>
<td>Photoshop/Digital Imaging</td>
</tr>
<tr>
<td>JOUR 101</td>
<td>Beginning Newswriting and Reporting</td>
</tr>
<tr>
<td>JOUR 105</td>
<td>Newspaper Production</td>
</tr>
</tbody>
</table>

PUBLIC RELATIONS

CERTIFICATE OF ACHIEVEMENT

TOTAL OF 38 UNITS

CORE REQUIREMENTS (12 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 100</td>
<td>Mass Communications and Society</td>
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<tr>
<td>JOUR 101</td>
<td>Beginning Newswriting and Reporting</td>
</tr>
<tr>
<td>JOUR 121</td>
<td>Multimedia Reporting</td>
</tr>
<tr>
<td>JOUR 157</td>
<td>Principles of Public Relations</td>
</tr>
<tr>
<td>or BA 157</td>
<td>Principles of Public Relations</td>
</tr>
</tbody>
</table>

DEPARTMENT REQUIREMENTS

(21 UNITS ANY COMBINATION, EACH COURSE MAY BE TAKEN TWICE)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 103</td>
<td>Newspaper Article Writing</td>
</tr>
<tr>
<td>JOUR 105</td>
<td>Newspaper Production</td>
</tr>
<tr>
<td>JOUR 106</td>
<td>talonmarks.com</td>
</tr>
<tr>
<td>JOUR 160L</td>
<td>College Magazine Production (requires co-requisite)</td>
</tr>
<tr>
<td>RTV 155</td>
<td>Radio Production</td>
</tr>
<tr>
<td>ART 188</td>
<td>Design for Desktop Publishing</td>
</tr>
<tr>
<td>BA 109</td>
<td>Marketing</td>
</tr>
<tr>
<td>JOUR 130</td>
<td>Photo Journalism</td>
</tr>
<tr>
<td>or PHOT 130</td>
<td>Photo Journalism</td>
</tr>
<tr>
<td>PHOT 100</td>
<td>Introductory Photography</td>
</tr>
<tr>
<td>PHOT 110</td>
<td>Introduction to Digital Photography</td>
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</tbody>
</table>

ADDITIONAL REQUIREMENTS (UP TO 5 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ART 194</td>
<td>Multimedia Design</td>
</tr>
<tr>
<td>ART 196</td>
<td>Introduction to Designing Web Graphics</td>
</tr>
<tr>
<td>JOUR 110</td>
<td>Broadcast News/Webcasting</td>
</tr>
<tr>
<td>or RTV 110</td>
<td>Broadcast News/Webcasting</td>
</tr>
<tr>
<td>JOUR 111</td>
<td>Introduction to Newsletters</td>
</tr>
<tr>
<td>JOUR 112</td>
<td>Copy Editing Skills</td>
</tr>
<tr>
<td>JOUR 122</td>
<td>Creating Podcasts for Media</td>
</tr>
<tr>
<td>JOUR 201</td>
<td>Advanced Reporting and Editing</td>
</tr>
<tr>
<td>JOUR 220</td>
<td>Feature Article Writing</td>
</tr>
<tr>
<td>JOUR 298</td>
<td>Directed Studies in Journalism</td>
</tr>
<tr>
<td>JOUR 299</td>
<td>Directed Studies in Journalism (must be a media internship)</td>
</tr>
<tr>
<td>or JOUR 171</td>
<td>Work Experience in Journalism (must be a media internship)</td>
</tr>
<tr>
<td>SPCH 160</td>
<td>Parliamentary Procedure</td>
</tr>
</tbody>
</table>

See Cerritos College Graduation Requirements.
CAREER OPPORTUNITIES: The AA 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 MAJOR PREPARATION FOR
THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 100</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 101</td>
<td>Beginning News Writing and Reporting</td>
<td>3</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION PREPARATION
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Fullerton
Journalism Concentration, Communications Major

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 201</td>
<td>Advanced Reporting and Editing</td>
<td>3</td>
</tr>
<tr>
<td>TH 241</td>
<td>Screenwriting</td>
<td>3</td>
</tr>
</tbody>
</table>

Other Communication major concentrations are: Advertising; Broadcast Journalism; 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 per minute.

California State Polytechnic University – Pomona

Communication Journalism

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 130</td>
<td>Photo Journalism</td>
<td>3</td>
</tr>
<tr>
<td>ART 188</td>
<td>Design for Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 100</td>
<td>Introductory Photography</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 235</td>
<td>Fundamentals of Argumentation and Persuasion</td>
<td>3</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
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</table>

NOTE: Pomona does not require Journalism 101 for the Journalism major.

San Diego State University

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>POL 101</td>
<td>American Political Institutions</td>
<td>3</td>
</tr>
<tr>
<td>POL 201</td>
<td>Introduction to Political Science and American Government</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: All prerequisites must be taken for a grade and completed with a minimum GPA. Journalism is an impacted major and will require a personal statement, two letters of recommendation and a cumulative GPA of 3.00 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)

MACHINE TOOL TECHNOLOGY
CERTIFICATE OF ACHIEVEMENT

MACHINIST OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTT 4L</td>
<td>Manual Machining Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>MTT 50</td>
<td>CNC Shop Math</td>
<td>3</td>
</tr>
<tr>
<td>MTT 52</td>
<td>Setup and Operation of CNC Mills</td>
<td>3</td>
</tr>
<tr>
<td>MTT 54</td>
<td>Blueprint Reading</td>
<td>2.5</td>
</tr>
<tr>
<td>MTT 55</td>
<td>Supplemental Machine Shop Studies</td>
<td>2</td>
</tr>
<tr>
<td>MTT 56</td>
<td>CNC Shop Inspection</td>
<td>2</td>
</tr>
<tr>
<td>MTT 57</td>
<td>Setup and Operation of CNC Lathes</td>
<td>3</td>
</tr>
<tr>
<td>MTT 60</td>
<td>Advanced Machine Tool Concepts</td>
<td>2</td>
</tr>
<tr>
<td>MTT 62</td>
<td>Fixture Tooling</td>
<td>2</td>
</tr>
<tr>
<td>MTT 100</td>
<td>Machine Tool Introduction</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS 24.5

NUMERICAL CONTROL MACHINE OPERATOR OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTT 1L</td>
<td>Numerical Control Specialty</td>
<td>4</td>
</tr>
<tr>
<td>MTT 50</td>
<td>CNC Shop Math</td>
<td>3</td>
</tr>
<tr>
<td>MTT 52</td>
<td>Setup and Operation of CNC Mills</td>
<td>3</td>
</tr>
<tr>
<td>MTT 54</td>
<td>Blueprint Reading</td>
<td>2.5</td>
</tr>
<tr>
<td>MTT 56</td>
<td>CNC Shop Inspection</td>
<td>2</td>
</tr>
<tr>
<td>MTT 57</td>
<td>Setup and Operation of CNC Lathes</td>
<td>3</td>
</tr>
<tr>
<td>MTT 100</td>
<td>Machine Tool Introduction</td>
<td>2</td>
</tr>
<tr>
<td>MTT 154</td>
<td>CNC Program Optimization</td>
<td>2.5</td>
</tr>
<tr>
<td>MTT 170</td>
<td>Computer Numerical Control Programming</td>
<td>2.5</td>
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TOTAL UNITS 24
### CURRICULA, REQUIREMENTS FOR MAJORS, CERTIFICATES AND TRANSFER PROGRAMS

#### NUMERICAL CONTROL TOOL PROGRAMMER OPTION
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MTT 50</td>
<td>CNC Shop Math</td>
<td>3</td>
</tr>
<tr>
<td>MTT 52</td>
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<td>Blueprint Reading</td>
<td>2.5</td>
</tr>
<tr>
<td>MTT 56</td>
<td>CNC Shop Inspection</td>
<td>2</td>
</tr>
<tr>
<td>MTT 57</td>
<td>Setup and Operation of CNC Lathes</td>
<td>3</td>
</tr>
<tr>
<td>MTT 100</td>
<td>Machine Tool Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MTT 154</td>
<td>CNC Program Optimization</td>
<td>2</td>
</tr>
<tr>
<td>MTT 76</td>
<td>CAD/CAM Virtual Gibbs</td>
<td>2.5</td>
</tr>
<tr>
<td>and MTT 177</td>
<td>Advanced GibbsCAM/CAD/CAM</td>
<td>2.5</td>
</tr>
<tr>
<td>and MTT 1L</td>
<td>Numerical Control Specialty</td>
<td>4</td>
</tr>
<tr>
<td>or MTT 51</td>
<td>CAD/CAM Introduction</td>
<td></td>
</tr>
<tr>
<td>and MTT 278</td>
<td>CAD/CAM Advanced</td>
<td>(3.5)</td>
</tr>
<tr>
<td>and MTT 1L</td>
<td>Numerical Control Specialty</td>
<td>(3)</td>
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<tr>
<td>MTT 170</td>
<td>Computer Numerical Control Programming</td>
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**TOTAL UNITS: 28.5**

#### TOOL AND DIE MAKER OPTION
<table>
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<tr>
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</thead>
<tbody>
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<tr>
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<td>Fixture Tooling</td>
<td>2</td>
</tr>
<tr>
<td>MTT 100</td>
<td>Machine Tool Introduction</td>
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<tr>
<td>ENGT 131</td>
<td>Fundamentals of Design Including AutoCad</td>
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<tr>
<td>WELD 100</td>
<td>Welding Fundamentals</td>
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</tbody>
</table>

**TOTAL UNITS: 24**

#### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) the above requirements for a Certificate of Achievement, (2) two courses from the following: MTT 70, MTT 71, PMT 65, ENGT 138; (3) the AA Degree requirements, and (4) electives as needed.

**RECOMMENDED ELECTIVES: MFGT 100, MTT 1L**

**CAREER OPPORTUNITIES: CNC Parts Programmer, CNC Machine Tool Operator.**

See Cerritos College Graduation Requirements.

#### MANUFACTURING TECHNOLOGY (MFGT) VERIFICATION 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)
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGT 60</td>
<td>Quality Assurance (QA)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 55</td>
<td>Quality Control (QC)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 57</td>
<td>Total Quality Management (TQM)</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**4.5**

#### QUALITY CONTROL (QC)
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MFGT 55</td>
<td>Quality Control (QC)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 53</td>
<td>Statistical Process Control (SPC)</td>
<td>1.5</td>
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</table>

**3.0**

#### STATISTICAL PROCESS CONTROL (SPC)
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MFGT 55</td>
<td>Quality Control (QC)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 53</td>
<td>Statistical Process Control (SPC)</td>
<td>1.5</td>
</tr>
<tr>
<td>TM 50</td>
<td>Technical Math</td>
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</table>

**5.5**

#### TOTAL QUALITY MANAGEMENT (TQM)
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGT 57</td>
<td>Total Quality Management (TQM)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 60</td>
<td>Quality Assurance (QA)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 55</td>
<td>Quality Control (QC)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 59</td>
<td>Design of Experiments (DOE)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 58</td>
<td>Benchmarking</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**6.0**

#### ISO 9000
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGT 56</td>
<td>ISO 9000:2000</td>
<td>1.5</td>
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</tbody>
</table>

**4.5**

#### ADVANCED QUALITY SYSTEMS (AQS)
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFGT 57</td>
<td>Total Quality Management (TQM)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 53</td>
<td>Statistical Process Control (SPC)</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 58</td>
<td>Benchmarking</td>
<td>1.5</td>
</tr>
<tr>
<td>MFGT 59</td>
<td>Design of Experiments (DOE)</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**6.0**

#### MATHEMATICS TRANSFER PROGRAM

**COMMON LOWER DIVISION PREPARATION FOR 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 150</td>
<td>PreCalculus Mathematics</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>
<tr>
<td>MATH 220</td>
<td>Analytical Geometry and Calculus III</td>
<td>4</td>
</tr>
</tbody>
</table>

**ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University — Dominguez Hills**

<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>3</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>3</td>
</tr>
</tbody>
</table>
### MATH EDUCATION OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>CIS 171</td>
<td>Visual Basic programming</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>CIS 178</td>
<td>Programming in Fortran</td>
<td>3</td>
</tr>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>4</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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 292</td>
<td>Data Structures</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 214</td>
<td>UNIX</td>
<td>3</td>
</tr>
</tbody>
</table>

### ECONOMICS COGNATE

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
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</table>

### PHYSICS/ENGINEERING COGNATE

<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>PHS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

### CHEMISTRY COGNATE

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
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</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
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</table>

### CIVIL ENGINEERING COGNATE

<table>
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<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ENGR 235</td>
<td>Statics</td>
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</table>

### California State University — Long Beach

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

### APPLIED MATHEMATICS OPTION

Complete the requirements listed above and follow sub-option 1 (science and engineering) PHYS 202, 203 or Engineering 215 or 235 or sub-option II (economics and management) ECON 201 and 202.

### MATHEMATICS 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>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>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>

Beside the BS in Mathematics, CSULA also offers the B.A. in Mathematics which requires Physics 201 and a minimum of 8 units from a list of additional electives in related areas: CHEM 111, 112, Physics 202, MATH 240, and PHIL 106.

Note: 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>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 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 178</td>
<td>Programming in Fortran</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
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<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

Major concentrations in Applied Mathematics, Secondary Teacher Prep, or Statistics require the same lower division preparation.

### University of California — Irvine

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
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<td>Calculus and Differential Equations</td>
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</tr>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 178</td>
<td>Programming in Fortran</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 182</td>
<td>JAVA Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>or CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
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<td>and PHYS 202</td>
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<td>4</td>
</tr>
<tr>
<td>and PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

Preference will be give to applicants with the highest overall GPA and who have completed the required course work of one year of Calculus. 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>
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<th>Title</th>
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</thead>
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</tr>
<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>

The courses listed above will also cover the requirements for Mathematics in Teaching minus the Biol 200 course option.
Mathematics of Computation/B.S. Option

<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>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>
<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>
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</tbody>
</table>

Mathematics/Applied Science/B.S. Option

Actuarial Concentration:

<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>
<tr>
<td>BUSA 101</td>
<td>Fundamentals of Accounting I</td>
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<tr>
<td>BUSA 102</td>
<td>Fundamentals of Accounting II</td>
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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>
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<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
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</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
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</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>MATH 240</td>
<td>Calculus and Differential Equations</td>
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</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>
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University of California – Riverside

<table>
<thead>
<tr>
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<th>Title</th>
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</thead>
<tbody>
<tr>
<td>MATH 240</td>
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</tr>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
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</tbody>
</table>

Computational Math Track/B.S. Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 292</td>
<td>Data Structures</td>
<td>3</td>
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</table>

Applied Math Track/B.S. Option

Biology Option

<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>
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</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>or BOT 120</td>
<td>Intro to Plant Science</td>
<td>4</td>
</tr>
<tr>
<td>and ZOOL 120</td>
<td>Intro to Animal Biology</td>
<td>4</td>
</tr>
<tr>
<td>and BIOL 201</td>
<td>Principles of Biology</td>
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</table>

Chemistry Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
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<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
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</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
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<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
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</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
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</table>

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>
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</table>

Environmental Science Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
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<tr>
<td>CHEM 112</td>
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</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
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Physics Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
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<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>

Statistics Option

Math 112     Elementary Statistics                  | 4     |

The Pure Math Track does not have any additional lower division course requirements. Students admitted to this major will need an overall GPA of at least 2.7 in UC transferable course work and IGETC is not accepted by this major.

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 Medical Assisting. 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**

<table>
<thead>
<tr>
<th>MEDICAL ASSISTING</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA 60</td>
<td>Introduction to Medical Assisting</td>
</tr>
<tr>
<td>MA 62A</td>
<td>Health Insurance and Billing</td>
</tr>
<tr>
<td>MA 62B</td>
<td>ICD-9 and CPT Coding</td>
</tr>
<tr>
<td>MA 64</td>
<td>Medical Office Assisting</td>
</tr>
<tr>
<td>MA 66</td>
<td>Medications and Specialties</td>
</tr>
<tr>
<td>MA 67</td>
<td>Medical Office Administration</td>
</tr>
<tr>
<td>MA 68</td>
<td>Medical Assisting Internship Experience</td>
</tr>
<tr>
<td>MA 73</td>
<td>Medical Assisting Occupational Work Experience</td>
</tr>
<tr>
<td>MA 74</td>
<td>Medical Assisting Occupational Work Experience</td>
</tr>
<tr>
<td>MA 161</td>
<td>Medical Terminology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HEALTH OCCUPATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 53</td>
</tr>
<tr>
<td>HO 54</td>
</tr>
<tr>
<td>HO 55</td>
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<table>
<thead>
<tr>
<th>PSYCHOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 101</td>
</tr>
<tr>
<td>or PSYC 150</td>
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</table>

<table>
<thead>
<tr>
<th>ELECTIVES (Choose only one of the following):</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 150</td>
</tr>
<tr>
<td>or SPAN 223</td>
</tr>
<tr>
<td>or HO 151</td>
</tr>
<tr>
<td>or HO 152</td>
</tr>
</tbody>
</table>

**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.

MENTAL HEALTH WORKER CERTIFICATE OF ACHIEVEMENT PROGRAM

MENTAL HEALTH WORKER CORE COURSES UNITS
INST 151 Principles of Recovery and Psychosocial Rehabilitation 3
INST 152 Helping Relationships 3
INST 272 Special Populations 3
PSYC 101 General Introductory Psychology 3
PSYC 271 Abnormal Psychology 3
PSYC 273 Mental Health Worker Field Experience 3

TOTAL CERTIFICATE REQUIREMENTS 18

RECOMMENDED COURSES
PSYC 103 Critical Thinking in Psychology 3
PSYC 150 Personal and Social Adjustment 3
PSYC 210 Elementary Statistics 3
PSYC 220 Research Methods 4
PSYC 241 Psychobiology 3
PSYC 245 Drugs and Behavior 3
PSYC 251 Developmental Psychology 3
PSYC 261 Social Psychology 3

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.

MICROBIOLOGY TRANSFER PROGRAM

COMMON LOWER DIVISION MAJOR PREPARATION FOR CALIFORNIA STATE UNIVERSITY
AND UNIVERSITY OF CALIFORNIA UNITS
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 PREPARATION 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
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
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: A&P 201 also required for Medical Technology Option only.

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
(Microbiology Option & Medical Technology Option)
CHEM 205 Quantitative Analysis Chemistry 4
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4
MICRO 200 Principles and Applications of Microbiology 5
PHYS 101 General Physics 4
PHYS 102 General Physics 4

NOTE: A&P 201 also required for Medical Technology Option only.
Recommended General Education Courses

ENGL 102  Freshman Composition and Literature  3
or ENGL 103  Critical and Argumentative Writing  3
HED 100  Contemporary Health Problems  3
or PSYC 101  General Introductory Psychology  3
or PSYC 150  Personal and Social Adjustment  3
or PSYC 241  Introduction to Psychobiology  3
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 fermentation's, 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:

<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>MUS 105</td>
<td>Music Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MUS 106</td>
<td>Music Theory/Musicianship I</td>
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</tr>
<tr>
<td>MUS 147</td>
<td>Basic Applied Music</td>
<td>1</td>
</tr>
<tr>
<td>MUS 148</td>
<td>Private Study/Recital I</td>
<td>1</td>
</tr>
<tr>
<td>MUS 152</td>
<td>The Art of Teaching Beginning Piano</td>
<td>2</td>
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<tr>
<td>MUS 154</td>
<td>Piano Ensemble</td>
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TOTAL UNITS: 16.5

TEACHING INTERMEDIATE PIANO CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
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<th>TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
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<tr>
<td>MUS 107</td>
<td>Music Theory/Musicianship I</td>
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<tr>
<td>MUS 149</td>
<td>Private Study/Recital II</td>
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</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>
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<tr>
<td>MUS 154</td>
<td>Piano Ensemble</td>
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</table>

TOTAL UNITS: 13.5

MUSIC – COMMERCIAL

ASSOCIATE IN ARTS DEGREE

REQUIRED MUSIC COURSES:

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<tr>
<th>COURSE</th>
<th>TITLE</th>
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<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>
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<td>MUS 106</td>
<td>Music Theory/Musicianship I, II</td>
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<tr>
<td>MUS 112</td>
<td>Elementary Piano I</td>
<td>2.5</td>
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<tr>
<td>MUS 135</td>
<td>This Business of Music</td>
<td>3</td>
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<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>
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</table>

TOTAL UNITS: 32.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

A minimum of 60 units to include: (1) The above music course and unit requirements, (2) the AA 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</th>
<th>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</td>
<td>Music Theory/Musicianship I</td>
<td>5</td>
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<tr>
<td>MUS 107</td>
<td>Music Theory/Musicianship II</td>
<td>5</td>
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<tr>
<td>MUS 112</td>
<td>Elementary Piano I</td>
<td>2</td>
</tr>
<tr>
<td>MUS 113</td>
<td>Elementary Piano II</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS: 10
MUS 148  Private Study/Recital I * 1
MUS 149  Private Study/Recital II * 1
MUS 150  Private Study/Recital III * 1
MUS 151  Private Study/Recital IV * 1

One course from:
MUS 101, 102, 103, 104, or 104B 3
**Music Electives 12

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 AA Degree general education requirements, and (3) electives as needed.

CAREER OPPORTUNITIES: Music therapist, music librarian, private instrument teacher, 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

COMMON LOWER DIVISION MAJOR PREPARATION FOR CAL STATE UNIVERSITY AND

University of California

Theory, private study/recital, and performance classes are generally required each semester of full-time programs (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.

UNITS

MUS 100  Music Appreciation 3
MUS 148, 149, 150, 151  Private Study/Recital I, II, III, IV 1, 1, 1, 1

VOICE STUDENTS

MUS 116, 117  Voice Class I, II 2-2
MUS 112, 113  Elementary Piano Class I, II 2-2

UNITS

MUS 112, 113  Elementary Piano Class I, II 2-2


ADDITIONAL LOWER DIVISION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Fullerton

In addition to the common lower division transfer music major preparation listed above, allied requirements for the composition concentration state a proficiency in foreign language French, Italian, or German (preferred) to be satisfied by one of the following:

- 4 years study of foreign language in High School
- Passing an exam given by the foreign language department
- Completing the second semester of the beginning college sequence (French 102 or German 102)

The allied requirement for the voice concentration is the same as the composition concentration but 2 foreign languages must be satisfied.

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).

For the bachelor's of music degree, admission to one of the options is determined by audition and approval of the chair of the department.

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; piano and one year of ensemble or repertory. All transfer students must pass a performance audition in order to declare a major in either the BA or B.Mus. degree program.

Transfer students must also take the placement tests in musicianship, theory, and history in order to receive credit toward fulfilling degree requirements.

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 French, German or Spanish. All applicants for admission are required to pass an audition in their principal performing medium or the submission of a composition portfolio for students planning to pursue composition. Also recommended preparation for the major is two years of participation in a large performance group such as orchestra, choir or wind ensemble.

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 AA degree in Natural Sciences - General, the following requirements must be met:
1. Completion of the AA 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

MISSION STATEMENT

The Cerritos College Nursing Program Mission is to prepare nurses to meet the needs of diverse populations in an ever changing health care environment.

PHILOSOPHY

Nursing is defined as a science, discipline and health care practice that focuses on the assessment, diagnosis and treatment of patients having health problems 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 Program 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 identify their patients 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 patient's coping mechanisms may be disrupted and the individual is defined as ill. The patient's health status is defined on a continuum from wellness to illness.

Nursing practice focuses on adaptation of the patient in four major modes: physiological, self-concept, role function, and interdependence. The program prepares students to understand individuals as total beings and to recognize and respect a diversity of spiritual and cultural/ethnic values.

COMPETENCIES EXPECTED OF THE ASSOCIATE DEGREE NURSE

The Associate Degree Nurse (ADN) graduate is prepared and expected to practice within the framework of the Educational Competencies for Graduates of Associate Degree Nursing Programs as identified by the National Council of Associate Degree Nursing Competencies Task Force in 2000. As identified by the Task Force, ADN graduates practice within the framework of eight core components and competencies. The core components of nursing practice are: professional behaviors, communication, assessment, clinical decision making, caring interventions, teaching and learning, collaboration, and managing care. These core components emphasize competencies related to diversity in healthcare, clinical decision making, assessment, patient education, continuity of care (including community aspects), collaboration and leadership. In order to meet the expected outcomes, the ADN graduate utilizes critical thinking and demonstrates clinical competence and accountability as an adaptable generalist who is committed to caring for others and valuing the profession of nursing.

The Associate Degree Nurse is an entry level practitioner and is competent to practice as a direct caregiver in a variety of health care settings which include diverse patient populations. ADN graduates are employed in a health care delivery system that continues to grow and change. Consequently, ADN graduates may pursue bachelors, masters and doctoral degrees 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 evidence-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 patients for whom students and graduates provide care. Education based on mastery learning is viewed by 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 for learning. To address these individual differences, learning experiences are structured from simple to complex.

The program embraces the diversity of cultural, linguistic, and philosophical differences represented in the student body. Course experiences are designed to encourage discussion, sharing and application of cultural practices that are unique to the individuals and groups represented in the campus and the community.

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.

CURRICULUM OVERVIEW

The nursing curriculum is based on the Nursing Process and the Roy Adaptation Model. The Nursing Process provides the framework for the application of the Roy Adaptation Model. The Roy Adaptation Model for Nursing was adopted by the Cerritos College nursing faculty in 1981. Currently, the program utilizes essential elements of the Roy Model to describe our beliefs about man, the environment, health and illness; the goals of nursing care and to organize the collection of data related to the patient's health status. Cerritos College faculty use the Educational Competencies for Graduates of Associate Degree Nursing Programs as identified by the National Council of Associate Degree
The Roy Adaptation Model views the person as a biopsychosocial being in constant interaction with the environment. As an adaptive organism, the person copes with changes in the environment. A person's health status is defined along a health-illness continuum and may be influenced by life stages and adaptation to needs. In this model, the person is also perceived as having four adaptive modes that identify patient behavior in response to illness or wellness. Behavior is assessed in each of the four modes: the Physiologic Mode, Self-Concept Mode, Role Function Mode and Interdependence Mode. The latter three modes are referred to as the Psychosocial Mode.

The underlying need of the Physiologic Mode is physiological integrity. Components of this mode are: Oxygenation, Nutrition, Elimination, Activity and Rest, Protection, Senses, Fluid and Electrolytes, Neurological Function, and Endocrine Function. The first five components are identified as basic needs inherent in achieving physiological integrity. The remaining four are considered complex processes which mediate activities regulating the organism's function. The curriculum addresses normal (adaptive/effective) and abnormal (maladaptive/ineffective) behaviors in each of these Physiologic Mode components, including wellness and disease prevention elements along with disease processes. For each disease or condition, instruction includes pathophysiology and the application of the nursing process: assessment; nursing diagnoses; planning and goal-setting; medical, surgical and nursing interventions; and expected outcomes (evaluation).

The Self-Concept Mode, which aims to maintain psychic integrity, consists of the Physical Self and the Personal Self. The Physical Self includes body sensation and body image. The Personal Self includes self-consistency, self-ideal/self-expectancy, and the moral-ethical-spiritual self. Self esteem is a pervasive aspect of the Personal Self and relates to the worth or value a person holds related to the self. Concepts related to grief and loss, anxiety and depression are among those addressed in the curriculum content.

The Role Function Mode has three components: Primary Role, Secondary Roles and Tertiary Roles. The underlying need for this mode is social integrity. The Primary Role is an ascribed role based on age, gender, ethnicity and developmental age; it determines the majority of a person's role behaviors. The Secondary Role component encompasses the roles that a person assumes to complete tasks associated with developmental stage and primary role. Tertiary Roles are chosen by the person, usually temporary, and often associated with accomplishment of minor tasks in a person's current development. Role performance includes instrumental and expressive behaviors. Curriculum concepts related to this mode include alterations in role function and role performance.

The Interdependence Mode is a social construct related to giving and receiving of love, respect and value. The underlying need of this mode is to attain and maintain affectional adequacy. Key concepts associated with this mode include: significant others, support systems, giving behaviors, and receiving behaviors. This mode reflects a balance between independence and dependence. Curriculum content includes management of dysfunctional dependence and dysfunctional independence as manifested through alterations in family processes, ineffective family coping, knowledge deficits, substance abuse, and related concepts.

The goal of nursing as expressed in the Roy Adaptation Model is to promote adaptation. The nursing process begins with first level assessment in which both adaptive (effective) and maladaptive (ineffective) behavioral responses of the person are assessed in each component of each mode. Maladaptive behaviors are clustered and expressed as nursing diagnoses. A plan to treat the nursing diagnosis is developed by establishing patient outcomes which are measurable and based on patient behaviors. Nursing interventions are formulated and implemented so that the outcomes can be accomplished. Evaluation of effectiveness of the plan is determined by whether the outcomes have or have not been achieved. If outcomes have not been met, reassessment occurs to determine whether outcomes and/or interventions must be modified.

Graduates of Associate Degree Nursing Programs exhibit behaviors that are characterized by clinical decision making, clinical competence, accountability, and a commitment to the value of caring. The Associate Degree Nurse is prepared to provide care to patients with acute and chronic health care needs and is concerned with individuals and their relationships within families, groups and communities. The nurse uses a collaborative approach in working with the patient and with other health care providers. To develop the cognitive, psychomotor and affective abilities necessary to function as a competent caregiver, the nursing student gains knowledge in nursing concepts, principles, processes, and skills. To support acquisition of this knowledge, the Cerritos College curriculum includes understanding of health, acute and chronic health deviations, nutrition, pharmacology, communication, human development, teaching-learning principles, current technology, humanities, and biological, social and behavioral sciences. Anatomy, physiology, microbiology, and English are prerequisite to the core nursing courses. To meet graduation requirements, students may concurrently study pharmacology, communication, fine arts and humanities courses.

The graduate of an Associate Degree program plays a significant role in management of patient care. Managing care is characterized by planning, implementing, organizing, coordinating, delegating and facilitating the continuity of patient care. The Cerritos College curriculum introduces the management of care role in the first semester. In the first semester of the program, the student begins the management of care of one patient. In the second through fourth semesters, the number of patients is progressively increased. In the final semester of the program, students manage care for a team of patients under the supervision of a staff mentor. In addition, the management of patient care includes developing skills in delegation, communication, leadership, and time and resource management. Concepts related to the scope of practice of various licensed and unlicensed caregivers, are included in the curriculum.

The graduate of an Associate Degree nursing program adheres to standards of professional practice, is accountable for her/his own actions and behaviors, and practices within ethical, legal, and regulatory frameworks of nursing. The nurse practices within the legal and ethical framework of nursing and contributes to maintaining high standards of nursing practice. Professional behaviors include the concern for others that is demonstrated by caring, valuing the profession of nursing, and participating in ongoing professional development. Curriculum content includes legal rules and regulations affecting nursing practice; institutional guidelines and requirements affecting the student nurse; the roles of professional organizations; resources to enhance the development of the nurse; political, social and economic forces affecting health care and nursing; and organizational factors affecting nursing education and practice.
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. Completion of ENGL 52, MATH 60, and READ 54 or equivalent with grades of Credit or “C” or higher or satisfactory completion of 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 prerequisite courses with grades of “C” or higher: A&P 150, A&P 151, ENGL 100, and MICR 200 with an overall grade point average of 2.5. Only one of the above courses can be repeated. A&P 150, A&P 151, and MICR 200 are recommended to be completed within six (6) years of admission.
4. Effective Fall 2008, students must pass a diagnostic assessment test (basic math, English, reading, and science) prior to program enrollment. Students who fail to achieve a passing score will be required to complete additional pre-nursing coursework to become eligible for admission.
5. A cumulative grade point average of 2.5 for all college work taken.

PROGRAM PREREQUISITES

Option A: A&P 150, A&P 151, ENGL 100, and MICR 200
Option B: Same as Option A.
Additional courses required for admission: NRSG 25, NRSG 211, NRSG 213A, NRSG 251, and PSYC 251 or equivalent with grades of Credit or “C” or higher. Valid California LPN license
Option C: Same as Option A.
Additional courses required for admission: NRSG 26, NRSG 215, NRSG 251, and PSYC 251 or equivalent with grades of credit or “C” or higher. Completion of a medication calculation examination with a score of 80% or higher. 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.
Additional requirements: Completion of a medication calculation examination with a score of 80% or higher. Valid California LVN license
Optional courses: NRSG 26, NRSG 251 (strongly recommended), PSYC 251. Completion of the college placement test process for advisement purposes. At least one (1) year of acute care experience in a skilled nursing or hospital based facility is strongly recommended
Option E: Same as Option A.
Additional courses required for admission: HO 152, NRSG 25 if entering prior to the middle of the second semester or NRSG 26 if entering at or following the middle of the second semester, NRSG 200, NRSG 215, NRSG 251, and PSYC 251 or equivalent with grades of Credit or “C” or higher. ENGL 52, MATH 60, and READ 54 or equivalent with grades of Credit or “C” or higher or satisfactory completion of the college placement test process. Completion of a medication calculation examination with a score of 80% or higher for entry at NRSG 220 or above. Students applying under this option will be notified individually for additional requirements relative to their entry points in the curriculum.

Option F: NRSG 26 and NRSG 215. Applicants must meet with the Director of Nursing and submit a 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 ENGL 52, MATH 60, and READ 54 or 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 applicants will be notified individually for additional requirements relative to their entry point in the program.

For more information on updated program information or prerequisites, please call the Health Occupations Division Office at (562) 860-2451, Ext. 2550.

APPLICATION PROCESS:

Step 1: If not previously enrolled at Cerritos College, the applicant must complete a College application. This can be done on-line or in the Admissions and Records Office (in Administration Building on Alondra Boulevard.)

Step 2: Complete the College's assessment test process at the Cerritos College Assessment Center. Test schedules are available in the Counseling Department. If assessment test requirements have already been met by equivalent measures, the applicant should see a counselor for options.

Step 3: After College assessment tests have been completed make an appointment with a counselor by calling (562) 860-2451, Ext. 2231; specify that this is for completion of a nursing application. If transcripts have not been submitted prior to appointment, copies of transcripts may be hand-carried to the appointment.

SELECTION PROCEDURES AND STANDARDS

1. Applications will only be accepted during the application period (March 1 through March 15).
2. The applicant must submit to the Health Occupations Division Office 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. College transcripts (unofficial or official)
   d. College assessment test results or indication by counselor that this requirement has been met through equivalent courses or activities
   e. Any additional items required for specific option (see below)
3. LVN applicants and transfer students seeking entry at NRSG 220, or above, will be scheduled for a medication calculation examination. Information regarding this examination will be provided in writing.
4. Applicants will be notified of eligibility for admission to the nursing program in writing.
5. Students who are eligible for admission into the nursing program will be required to take and pass a diagnostic assessment test (basic math, English, reading, and science).
6. Notification of admission to the program will be done in writing.
7. Admitted students and alternates will be required to attend a mandatory orientation meeting. During the orientation, information will be given regarding textbooks, uniforms, registration procedures, and other relevant matters.
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 $20 for California residents, $173 for non-residents of California and $200 for international students. A College Services 1D fee ($10) and Health Services Fee ($14) are assessed each semester. During the four core semesters, lab material fees total approximately $560, textbooks approximately $1700, 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 NCLEXRN, 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 ENGL 52, MATH 60, and READ 54 or equivalents with grades of Credit or “C” or higher or satisfactory completion of the college placement test process.
## REQUIRED COURSES

### SEMESTER 1

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<tr>
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<tbody>
<tr>
<td>NRSG 210</td>
<td><strong>Fundamentals of Nursing</strong></td>
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<tr>
<td>NRSG 211</td>
<td><strong>Introduction to Theoretical Framework</strong></td>
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<td>NRSG 212</td>
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### Semester 2

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<td>NRSG 220</td>
<td><strong>Medical-Surgical Nursing</strong></td>
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<td>NRSG 222</td>
<td><strong>Maternal/Child Nursing</strong></td>
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### Semester 3

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<td>NRSG 232</td>
<td><strong>Medical-Surgical Nursing</strong></td>
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### Semester 4

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<tr>
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<td><em>Professional Role Transition</em></td>
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### ELECTIVES

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<td>NRSG 80</td>
<td><strong>Nursing Process Documentation</strong></td>
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*6-week courses **9-week courses

### OPTION B – LPT-ADN MOBILITY PROGRAM

The Nursing Program offers to 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, ENGL 100, and MICR 200 or equivalent with grades of Credit or "C" or higher. ENGL 52, MATH 60, and READ 54 or equivalents with grades of Credit or "C" or higher or satisfactory completion of the college placement test process.
- Additional courses required for admission: HO 152, NRSG 25, NRSG 211, NRSG 213A, NRSG 251, and PSYC 251 or equivalents with grades of Credit or "C" or higher. Valid California LPT license.

### REQUIRED COURSES

### SEMESTER 1

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### Semester 2

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<td><strong>Major Drugs and Nursing Management II</strong></td>
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<tr>
<td>NRSG 220</td>
<td><strong>Medical-Surgical Nursing</strong></td>
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<tr>
<td>NRSG 222</td>
<td><strong>Maternal/Child Nursing</strong></td>
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</table>

### Semester 3

<table>
<thead>
<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>NRSG 230</td>
<td><strong>Psychosocial and Community Nursing</strong></td>
<td>5.0</td>
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<tr>
<td>NRSG 232</td>
<td><strong>Medical-Surgical Nursing</strong></td>
<td>5.0</td>
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</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, ENGL 100, and MICR 200 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 satisfactory completion of the college placement test process.
- Additional courses required for admission: NRSG 26, NRSG 215, NRSG 251, and PSYC 251 or equivalent with grades of Credit or "C" or higher. Completion of a medication calculation examination with a score of 80% or higher. Valid California LVN license and at least one (1) year acute care experience in a skilled nursing or hospital based facility.

### REQUIRED COURSES

### SEMESTER 1

<table>
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<tr>
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<td><strong>Medical-Surgical Nursing</strong></td>
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### Semester 2

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<tr>
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<td><strong>Medical-Surgical Nursing</strong></td>
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<tr>
<td>NRSG 242</td>
<td><em>Professional Role Transition</em></td>
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### ELECTIVES

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<tr>
<td>NRSG 80</td>
<td><strong>Nursing Process Documentation</strong></td>
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</table>

*6-week course **9-week courses

### OPTION D – LVN-30 UNIT OPTION

The Nursing Program offers to 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, and NRSG 215 or equivalent with grades of Credit or “C” or higher.
Additional requirement: Valid California LVN license and completion of a medication calculation examination with a score of 80% or higher.
Optional courses: NRSG 26, NRSG 251 (strongly recommended), and PSYC 251. Completion of the college placement test process for advisement purposes. At least one (1) year acute care experience in a skilled nursing or hospital based facility.

REQUIRED COURSES: UNITS
Semester 1
NRSG 230 **Psychosocial and Community Nursing 5.0
NRSG 232 **Medical-Surgical Nursing 4 5.0
Semester 2
NRSG 240 **Medical-Surgical Nursing 5 5.0
NRSG 242 *Professional Role Transition 3.0
ELECTIVES
NRSG 48T **Elective Nursing Tutorial 0.5
NRSG 80 **Nursing Process Documentation 1.0
*6-week course **9-week courses

OPTION E – TRANSFER AND CHALLENGE

PREREQUISITES:
A&P 150, A&P 151, ENGL 100, and MICR 200 or equivalent with grades of Credit or “C” or higher.
Additional courses required for admission: HO 152, NRSG 25 if entering prior to the middle of the second semester or NRSG 26 if entering at or following the middle of the second semester. NRSG 200, NRSG 215, NRSG 251, and PSYC 251 or equivalent with grades of Credit or “C” or higher. ENGL 52, MATH 60, and READ 54, or equivalent with grades of Credit or “C” or higher or satisfactory completion of the college placement test process. Completion of a medication calculation examination with a score of 80% or higher for entry at NRSG 222 or above. 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. NRSG 26 and NRSG 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—914 in the catalog for the major requirements.

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS
California State University – Fullerton
Bachelor of Science in Nursing – Registered Nursing
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&P150 & A&P 151, CHEM 100 or CHEM 110, or CHEM 111, MICR 200, PSYC 101, SOC 101, or ANTH 100.
Completion of one year of satisfactory work experience as a registered nurse recommended.
CSUF also offers a Bachelor of Science in Nursing – Basic. Please refer to the admissions website for further information.
California State University – Los Angeles
A&P 200 and A&P 201
or A&P 150 and A&P 151
CHEM 100
ENGL 100
One course from ENGL 103*, PHIL 103, PHIL 106 or 
SPCH 235
PSYCH 101
PSYCH 251
SOC 101
SPCH 100, 120, 130, 132 or 150
HO 151 and HO 152
A statistics course A statistics course which includes inferential statistics.
(R.N. Transfer Students are exempt).

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

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
MICR 200
PSYCH 101
SOC 101

Prerequisite general education GE courses:
CSU GE Oral Communication – 3 semester units
CSU GE Written Communication (college composition) – 3 semester units
CSU GE Critical Thinking – 3 semester units
CSU GE Quantitative Reasoning – 3 semester units
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.
Graduation from an accredited Associate Degree program or evaluation of diploma program for equivalency by an Accredited Associate Degree program.
Completion of CSU or IGETC GE certification requirements.

University of California – Los Angeles
UCLA School of Nursing
RN-B.S./Postlicensure/B.S.
The Generic/Prelicensure Bachelor of Science (B.S.) degree program at UCLA has been designed to prepare students for a career in nursing. This is a four year program beginning in the freshman year. Transfer students will be considered for a very limited number of openings beginning Fall 2008.

ADMISSION REQUIREMENTS
A&P 200 or A&P 150
A&P 201 or A&P 151
BIOL 200 and BIOL 201
BIOL 202
CHEM 111 and CHEM 112
CHEM 211
PSYCH 101
ENGL 100 and ENGL 102 or ENGL 103 or PHIL 202 or PSYCH 103
or SPCH 235

Nursing-RN-BS/Postlicensure/B.S.
The RN-BS/Postlicensure program at UCLA is intended to prepare registered nurses for advanced-practice study at the graduate level.

ADMISSION REQUIREMENTS
A&P 200 or A&P 150
A&P 201 or A&P 151
MICR 200
PHYS 100
CHEM 110
BIO 200*, 201*, & 202*
CHEM 111*, 112* AND 211*
ANTH 100
PSYCH 101
SOC 101
ENGL 100
ENGL 102 OR ENGL 103 OR PHIL 202 OR PSYCH 103 OR SPCH 235

* Courses may be completed prior to transfer but not required for admission
Select one course or more from Arts & Humanities. Choose from IGETC AREA 3
One UC transferable course in mathematical concepts and quantitative reasoning that has a prerequisite of intermediate algebra or higher is required.

In addition to the above requirements applicants must:
• Associate’s Degree in Nursing from a state-approved program or a Diploma in Nursing from an accredited program.
• Current licensure as a registered nurse and a minimum of one year of full time experience as a registered nurse within the past five years.
• Have a cumulative GPA of 3.0 in all UC transferable courses and a “C” or better on four required Excelsior College examinations.
• Complete specified major prerequisites with “C” or better grades
• Submit a statement of purpose that includes an assessment of potential for advanced practice study and a clear statement of goals upon completion of the program.
• Completion of IGETC is not recommended by the School of Nursing for the RN-BS/Postlicensure program.
CAREER OPPORTUNITIES: Baccalaureate program graduates are prepared to function as a professional nurse in the primary care role in a variety of health settings, such as Hospitals, Clinics, Doctor's offices, Jails, and Armed Services.

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>
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<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:

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 Completion of MATH 40 with a grade of Credit or “C”

RECORDS OF MAJOR, CERTIFICATES AND TRANSFER PROGRAMS

- For other options see your counselor.

READING PROFICIENCY REQUIREMENTS

The requirement can be met by one of the following options:

- Successfully complete the Reading Proficiency Test at the 12th grade level. The Reading Proficiency Test may be taken no more than once each semester.

- Completion of READ 54 with a grade of Credit or “C” or higher.

- 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, Ext. 2231.

*BCOT 62  Microcomputer  Keyboarding  1
or *BCOT 135  Typewriting Speed/Control Building  1

Total Units Required 11

*Students who provide documented ability to type 35 wpm or more may choose to waive the keyboarding requirement.
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**

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<td>PHAR 85</td>
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<td>PHAR 90</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 95</td>
<td>5</td>
</tr>
<tr>
<td>MA 161</td>
<td>3</td>
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</table>

*or* A&P 120 Introduction to Anatomy and Physiology 4

**Total Certificate Requirement** 31/33

**Associate in Arts Degree Requirements:**

Meet the requirements for a Certificate of Achievement in Pharmacy Technician. For an AA 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 Major Preparation**

**For California State University**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 100</td>
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</table>

**California State University – Los Angeles**

PHIL 106 Introduction to Logic 3

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

**California State University – Long Beach**

PHIL 100 Introduction to Philosophy 3

or PHIL 102 Introduction to 20th Century Philosophy 3

**University of California – Irvine**

NOTE: In fulfillment of the requirements below, a single course may be used only once.

PHIL 106 Introduction to Logic 3

PHIL 201 Introduction to 20th Century Philosophy 3

At least one course from each area, A-D:

A)

<table>
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B)

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D)

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<td>PHIL 102</td>
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<tr>
<td>PHIL 201</td>
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**Additional Requirements:**

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<td>JAPN 202</td>
<td>(4)</td>
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<tr>
<td>SPAN 202</td>
<td>(4)</td>
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</tbody>
</table>

**University of California – Los Angeles**

PHIL 102 Introduction to Ethics 3

PHIL 103 Philosophical Reasoning: Critical thinking in Philosophy 3

or PHIL 106 Introduction to Logic 3

**University of California – Riverside**

PHIL 106 Introduction to Logic 3
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: The philosophy major is intended for students who plan to teach philosophy, for pre-professional students in such areas as theology, law, and as a foundation for graduate studies in the areas of library science, social science, diplomacy, theoretical physical science, and specialized historical studies.

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

PHOTOGRAPHY
ASSOCIATE IN ARTS DEGREE PROGRAM

MAJOR REQUIREMENTS (26 UNITS) 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 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 Web Design with Flash and Dreamweaver 3
JOUR 130 Photo Journalism 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 MAJOR PREPARATION FOR CALIFORNIA STATE UNIVERSITY UNITS
PHOT 100 Introductory Photography 3

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.

Additional Lower Division Major Preparation for Specific Transfer Institutions.

California State University – Fullerton

Photo communications may be selected as a concentration in the Communications major.
JOUR 100 Mass Communication in Society 3
JOUR 101 Begin Newswriting and Report 3

Creative Photography is an available concentration in the Bachelor of Fine Arts major.

Lower-Division Studio Course (Admission Requirements)
ART 110 Freehand Drawing 3
or ART 111 Intermediate Freehand Drawing (3)
ART 120 Two-Dimensional Design 3
ART 121 Three-Dimensional Design 3
ART 130B Fundamentals of Painting 3

Creative Photography Concentration-Preparation
PHOT 102 Intermediate Photography 3
or PHOT 200 Advanced Photography (3)
or PHOT 240 Experimental Photography (3)
ART 101 Art History I: Prehistory to Gothic 3
ART 102 Art History II: Renaissance to Rococo 3
ART 112 Life Drawing 3
or ART 213 Intermediate Life Drawing (3)
ART 116 Beginning Printmaking 3
or ART 117 Intermediate Printmaking (3)
or ART 219 Advance Etching (3)

Students may meet the 6 unit requirement for lower division studio courses by choosing two courses from among the following courses: PHOT 102 or 200 or 240; ART 110 or 111; ART 112 or 213; ART 116 or 117 or 219; ART 136; ART 162; ART 182A; ART 185; ART 191A; ART 231. Units taken to meet his requirement may not also be used to meet the Creative Photography Concentration-Preparation requirements above.

California State University – Long Beach

Art Photography may be selected as an option in the Art major. See the Art and Design Transfer program in the catalog, the Art transfer major sheet in Counseling or an Art counselor 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 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. See State University General Education List.

OCCUPATIONAL PREPAREDNESS IN PHOTOGRAPHY
VERIFICATION OF COMPLETION
The verification helps the student focus on recognizing the variety available to the novice photographer, and focusing on excellence in one or more area of specialization. Completion of this verification will prepare the student for entry-level employment in professional commercial photography.

OCCUPATIONAL PREPAREDNESS IN PHOTOGRAPHY
VERIFICATION OF COMPLETION REQUIREMENTS 15 UNITS
Select 12 units from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 100</td>
<td>Introductory Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 110</td>
<td>Introduction to Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT/JOUR 130</td>
<td>Photo Journalism</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 171</td>
<td>Occupational Work Experience in Photography</td>
<td>1</td>
</tr>
<tr>
<td>PHOT 230</td>
<td>Portrait Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 232</td>
<td>Approaches to Studio Lighting</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 234</td>
<td>Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 298</td>
<td>Directed Studies</td>
<td>1</td>
</tr>
<tr>
<td>PHOT 299</td>
<td>Directed Studies</td>
<td>2</td>
</tr>
</tbody>
</table>

One course must be taken from the following selection

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>BA 113</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>USA 100</td>
<td>Introduction to Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

DIGITAL PHOTOGRAPHY
VERIFICATION OF COMPLETION
This verification helps the student focus on the practice of digital photography. Emphasis will be placed on achieving the ability to produce state-of-the-art digital files and prints. Completion of this verification will prepare the student for entry-level employment in the growing field of photographic media.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 110</td>
<td>Introduction to Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 112</td>
<td>Intermediate Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

TRADITIONAL BLACK-AND-WHITE PHOTOGRAPHY
VERIFICATION OF COMPLETION
This verification helps the student focus on the practice of traditional black-and-white photography. Emphasis will be placed on achieving the ability to produce archival prints of the highest quality using traditional wet darkroom techniques combined with advanced exposure applications. Technique is presented as a support for producing meaningful images, rather than as an end in itself.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 100</td>
<td>Introductory Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 102</td>
<td>Intermediate Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 200</td>
<td>Advanced Photography</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FINE ART PHOTOGRAPHY
VERIFICATION OF COMPLETION
This verification helps the student focus on a variety of photographic techniques and genres within contemporary fine art practice. Emphasis will be placed on achieving the ability to produce archival prints of the highest quality using both digital and traditional wet darkroom techniques. Technique is presented as a support for producing meaningful images grounded in a historical awareness of the medium. Understanding the ubiquity of photography in today's image culture is also stressed. Completion of this verification will prepare the student for successful transfer to universities offering a baccalaureate program, as well as entry-level expertise in gallery exhibition conventions.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 100</td>
<td>Introductory Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 102</td>
<td>Intermediate Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 122</td>
<td>Color Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 160</td>
<td>History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 234</td>
<td>Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 240</td>
<td>Experimental Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 250</td>
<td>Contemporary Photographic Expression</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 252</td>
<td>Photography of the Landscape</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 298</td>
<td>Directed Studies</td>
<td>1</td>
</tr>
<tr>
<td>PHOT 299</td>
<td>Directed Studies</td>
<td>2</td>
</tr>
</tbody>
</table>

PHYSICAL EDUCATION
EXERCISE SCIENCE: ATHLETIC TRAINER AIDE
CERTIFICATE OF ACHIEVEMENT

DEPARTMENT REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 120*</td>
<td>Introduction to Human Anatomy &amp; Physiology</td>
<td>4</td>
</tr>
<tr>
<td>MA 161</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>HED 110</td>
<td>Community First Aid and CPR</td>
<td>3</td>
</tr>
<tr>
<td>PE 107</td>
<td>Introduction to Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>PE 141</td>
<td>Fitness and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>PE 254</td>
<td>Measurement and Interpretation of Fitness</td>
<td>3</td>
</tr>
<tr>
<td>PE 255</td>
<td>Programs and Principles of Conditioning</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL |                                           |       |
**Curricula, Requirements for Majors, Certificates and Transfer Programs**

**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/AA degree is nontransferable.

Please see Counselors or the respective department chairperson for additional alternatives.

**EXERCISE SCIENCE: FITNESS SPECIALIST CERTIFICATE OF ACHIEVEMENT**

**DEPARTMENT REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HED 110</td>
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</tr>
<tr>
<td>HED 200</td>
<td>3</td>
</tr>
<tr>
<td>PE 107</td>
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<tr>
<td>PE 141</td>
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<tr>
<td>PE 254</td>
<td>3</td>
</tr>
<tr>
<td>PE 255</td>
<td>3</td>
</tr>
<tr>
<td>PE 271B</td>
<td>1</td>
</tr>
<tr>
<td>A&amp;P 120*</td>
<td>4</td>
</tr>
<tr>
<td>BA 100</td>
<td>3</td>
</tr>
</tbody>
</table>

*(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: 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/AA 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 AA degree in Physical Education the following requirements must be met:

1) Completion of the AA 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 Units

See Cerritos College Graduation Requirements.

**REQUIRED CORE COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 100</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>HED 110</td>
<td>3</td>
</tr>
<tr>
<td>A&amp;P 130</td>
<td>5</td>
</tr>
<tr>
<td>or A&amp;P 200</td>
<td></td>
</tr>
<tr>
<td>and A&amp;P 201</td>
<td></td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 121</td>
<td>1</td>
</tr>
<tr>
<td>PE 131</td>
<td>1</td>
</tr>
<tr>
<td>PE 132A</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 132B</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 133</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 134</td>
<td>1</td>
</tr>
<tr>
<td>PE 143</td>
<td>1</td>
</tr>
<tr>
<td>PE 145</td>
<td>1</td>
</tr>
</tbody>
</table>

**(2) Fitness**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 122</td>
<td>1</td>
</tr>
<tr>
<td>PE 130</td>
<td>1</td>
</tr>
<tr>
<td>PE 135A</td>
<td>1</td>
</tr>
<tr>
<td>PE 135B</td>
<td>2</td>
</tr>
<tr>
<td>PE 138</td>
<td>1</td>
</tr>
<tr>
<td>PE 139</td>
<td>1</td>
</tr>
<tr>
<td>PE 146</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**(3) Aquatics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 123</td>
<td>1</td>
</tr>
<tr>
<td>PE 150A</td>
<td>1</td>
</tr>
<tr>
<td>PE 150B</td>
<td>2</td>
</tr>
<tr>
<td>PE 170</td>
<td>2</td>
</tr>
</tbody>
</table>

*Participation in Intercollegiate Swimming or Water Polo will satisfy this requirement*
(4) Team Activities

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 124</td>
<td>Wheelchair Activities</td>
<td>1</td>
</tr>
<tr>
<td>PE 171A</td>
<td>Softball</td>
<td>1</td>
</tr>
<tr>
<td>PE 171B</td>
<td>Softball, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 171C</td>
<td>Slow-Pitch Softball</td>
<td>1</td>
</tr>
<tr>
<td>PE 172A</td>
<td>Volleyball, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 172B</td>
<td>Volleyball, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 175A</td>
<td>Baseball, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 175B</td>
<td>Baseball, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 176A</td>
<td>Beginning Basketball</td>
<td>1</td>
</tr>
<tr>
<td>PE 176B</td>
<td>Basketball, Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 177</td>
<td>Flag Football</td>
<td>1</td>
</tr>
<tr>
<td>PE 178</td>
<td>Football, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 179A</td>
<td>Soccer, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 179B</td>
<td>Soccer, Intermediate/Advanced</td>
<td>2</td>
</tr>
</tbody>
</table>

(Participation in Intercollegiate Athletics excluding swimming and water polo will fulfill this requirement)

(5) Individual Activities

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 120</td>
<td>Sedentary Activities for Students with Disabilities</td>
<td>1</td>
</tr>
<tr>
<td>PE 151</td>
<td>Wrestling</td>
<td>1</td>
</tr>
<tr>
<td>PE 153A</td>
<td>Backpacking, Beginning</td>
<td>2</td>
</tr>
<tr>
<td>PE 153B</td>
<td>Backpacking, Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 154A</td>
<td>Badminton, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 154B</td>
<td>Badminton, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 155A</td>
<td>Bowling, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 155B</td>
<td>Bowling, Intermediate/Advanced</td>
<td>1</td>
</tr>
<tr>
<td>PE 156A</td>
<td>Golf, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 156B</td>
<td>Golf, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 158A</td>
<td>Racquetball, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 158B</td>
<td>Racquetball, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 159A</td>
<td>Tennis, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 159B</td>
<td>Tennis, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 160</td>
<td>Personal Self Defense</td>
<td>1</td>
</tr>
<tr>
<td>PE 180</td>
<td>Introduction to Dance Movement</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 182A</td>
<td>Dance, Modern, Beginning</td>
<td>2</td>
</tr>
<tr>
<td>PE 182B</td>
<td>Dance, Modern, Intermediate</td>
<td>2</td>
</tr>
<tr>
<td>PE 186A</td>
<td>Beginning Ballet</td>
<td>2</td>
</tr>
<tr>
<td>PE 186B</td>
<td>Intermediate Ballet</td>
<td>2</td>
</tr>
<tr>
<td>PE 193</td>
<td>Introduction to Ballroom Dance</td>
<td>2</td>
</tr>
<tr>
<td>PE 195</td>
<td>Commercial Dance</td>
<td>2</td>
</tr>
<tr>
<td>PE 196</td>
<td>Latin Social Dance</td>
<td>2</td>
</tr>
</tbody>
</table>

PE ELECTIVE COURSES (3 UNITS MINIMUM)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 101A</td>
<td>Sports Officiating for Football</td>
<td>1</td>
</tr>
<tr>
<td>PE 101B</td>
<td>Sports Officiating for Men's and Women's Basketball</td>
<td>1</td>
</tr>
<tr>
<td>PE 102A</td>
<td>Sports Officiating for Baseball</td>
<td>1</td>
</tr>
<tr>
<td>PE 102B</td>
<td>Sports Officiating for Men's and Women's Track &amp; Field</td>
<td>1</td>
</tr>
<tr>
<td>PE 105</td>
<td>Student Athlete in Society</td>
<td>2</td>
</tr>
<tr>
<td>PE 106</td>
<td>Women in Sports</td>
<td>3</td>
</tr>
<tr>
<td>PE 125</td>
<td>Water Safety Instructor (WSI)</td>
<td>2</td>
</tr>
<tr>
<td>PE 191</td>
<td>History of Dance</td>
<td>3</td>
</tr>
<tr>
<td>PE 192</td>
<td>Dance and Digital Technology</td>
<td>3</td>
</tr>
<tr>
<td>PE 233</td>
<td>Sports Psychology</td>
<td>1</td>
</tr>
<tr>
<td>PE 235</td>
<td>Measurement and Interpretation of Fitness</td>
<td>3</td>
</tr>
<tr>
<td>PE 235</td>
<td>Programs and Principles of Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>PE 235</td>
<td>Athletic Injury Assessment and Reconditioning</td>
<td>2</td>
</tr>
<tr>
<td>PE 235</td>
<td>Athletic Injury Taping, Bandaging &amp; Immobilization</td>
<td>1</td>
</tr>
<tr>
<td>HED 200</td>
<td>Nutrition for Health, Fitness and Physical Conditioning</td>
<td>3</td>
</tr>
</tbody>
</table>

RECOMMENDED GENERAL EDUCATION ELECTIVES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HED 100</td>
<td>Contemporary Health Problems</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>3</td>
</tr>
</tbody>
</table>

PHYSICAL EDUCATION TRANSFER PROGRAM

COMMON LOWER DIVISION MAJOR PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HED 110</td>
<td>Community First Aid and CPR</td>
<td>3</td>
</tr>
<tr>
<td>PE 100</td>
<td>Introduction to Physical Education and Sport</td>
<td>2</td>
</tr>
</tbody>
</table>

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills

Kinesiology Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 100</td>
<td>Introduction to Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 200</td>
<td>Human Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>and A&amp;P 201</td>
<td>Introduction to Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 202</td>
<td>Human Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>PE 100</td>
<td>Introduction to Physical Education and Sport</td>
<td>2</td>
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</table>

Pre-Physical Therapy Option Add

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>PHY 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
</tbody>
</table>

Options available are Athletic Training Education, Dance Concentration, Fitness Director, Pre-Physical Therapy and Teaching. Most options require additional physical activity units. See a counselor for additional option requirements.

California State University – Fullerton

Kinesiology Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 120</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Select six (6) units from the following:

- Fitness (1 unit)
- Aquatics (1 unit)
- Martial Arts/Combatives (1 unit)
- Individual Sports (1 unit)
- Racquet Sports (1 unit)
- Team Sports (1 unit)

California State University – Long Beach

Kinesiology Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 151</td>
<td>Introduction to Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 201</td>
<td>Human Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 130</td>
<td>Introduction to Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>
### ADDITIONAL REQUIREMENTS:

#### Athletic Training Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 100</td>
<td>Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>HO 152</td>
<td>Normal and Therapeutic Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HED 100</td>
<td>Contemporary Health Problems</td>
<td>3</td>
</tr>
<tr>
<td>PE 107</td>
<td>Introduction to Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 210</td>
<td>Elementary Statistics</td>
<td>4</td>
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</table>

#### Exercise Science Option

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
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<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>

**Note:** Take additional elective units from courses listed below. You will be required to take total of 18 units (minimum 6 units from KIN upper division courses after transfer).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
<td>4</td>
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<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
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<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>HO 152</td>
<td>Normal and Therapeutic Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MA 161</td>
<td>Medical Terminology</td>
<td>3</td>
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</table>

#### Fitness Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>HO 152</td>
<td>Normal and Therapeutic Nutrition</td>
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</table>

**Note:** Take 7 physical activity units from a minimum of two different categories. See counselor for details.

#### Kinesiotherapy Option

<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
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<tr>
<td>or PSYC 210</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 241</td>
<td>Introduction to Psychobiology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 220</td>
<td>Research Methods</td>
<td>4</td>
</tr>
<tr>
<td>HED 110</td>
<td>Community First Aid and CPR</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note:** Take 6 physical activity units from a minimum of two different categories. See counselor for details.

#### Physical Education Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>PE 160</td>
<td>Personal Self Defense</td>
<td>1</td>
</tr>
<tr>
<td>PE 125</td>
<td>Water Safety Instructor</td>
<td>2</td>
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</table>

#### Sport Psychology and Coaching Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 152</td>
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<td>3</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or PSYC 210</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 241</td>
<td>Introduction to Psychobiology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 220</td>
<td>Research Methods</td>
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</tbody>
</table>

**Note:** Take 2 physical activity units. See counselor for details.

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### California State University – Northridge

#### Kinesiology Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
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<tr>
<td>A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
<td>4</td>
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<tr>
<td>or A&amp;P 200</td>
<td>Human Anatomy</td>
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<tr>
<td>and A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 151</td>
<td>Introduction to Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>and A&amp;P 201</td>
<td>Human Physiology</td>
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</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
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</table>

#### ADDITIONAL REQUIREMENTS:

#### Physical Education Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HED 110</td>
<td>Community First Aid and CPR</td>
<td>3</td>
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</tbody>
</table>

#### Exercise Science Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
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<tr>
<td>or CHEM 110</td>
<td>Elementary Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
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#### Athletic Training Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
<td>4</td>
</tr>
<tr>
<td>A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>and A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 151</td>
<td>Introduction to Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>and A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>HO 152</td>
<td>Normal and Therapeutic Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MATH 114</td>
<td>College Algebra</td>
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<tr>
<td>or Math 150</td>
<td>Precalculus Mathematics</td>
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</tr>
<tr>
<td>or Math 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Intro to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note:** 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.

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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.
EXERCISE SCIENCE
ASSOCIATE IN ARTS DEGREE

REQUIRED COURSES

CORE REQUIREMENTS (19 UNITS) UNITS
HED 110 Community First Aide and CPR 3
PE 107 Introduction to Athletic Training 3
PE 141 Fitness and Wellness 3
PE 254 Measurement and Interpretation to Fitness 3
PE 255 Programs and Principles of Conditioning 3
PE 271 Occupational Work Experience for Athletic Training and Fitness 1
AP 120* Anatomy and Physiology 4

*(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
BA 100 Fundamentals of Business 3
HED 200 Nutrition For Health, Fitness and the Physical Conditioning 3
PE 271B Occupational Work Experience for Fitness 1

Athletic Training Emphasis
MA161 Medical Terminology 3
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

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 National 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 AA Degree:

- A&P 150 Human Anatomy 4
- A&P 151 Human Physiology 4
- ENG 100 Freshman Composition 4
- MA 161 Medical Terminology 3
- PSYC 101 General Introductory Psychology 3
- SPCH 100 Oral Communication 3
- or SPCH 130 Fundamentals of Speaking 3

**FIRST YEAR**

**First Semester**

- PTA 110 Introduction to Physical Therapy 4
- PTA 120 Kinesiology 4

**Second Semester**

- PTA 125 Pathology 3
- PTA 126 Clinical Practicum I 4
- PTA 127 Soft Tissue Interventions 2
- PTA 128 Physical Therapy Aspects of Growth and Development 3
- PTA 235 Neurology 3

**Summer Semester**

- PTA 129 Physical Therapy Aspects of Aging and Integumentary Management 1.5

**SECOND YEAR**

**First Semester**

- PTA 230 Therapeutic Exercise 4
- PTA 233 Prosthetics and Orthotics for Allied Health Professionals 2
- PTA 236 Clinical Practicum II 4

**Second Semester**

- PTA 240 Activities of Daily Living 2
- PTA 245 Advanced Modalities 3
- PTA 246 Clinical Affiliation 4

See Cerritos College Graduation Requirements.

**PHYSICS TRANSFER PROGRAM**

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

**UNITS**

- PHYS 201 Engineering Physics 4
- PHYS 202 Engineering Physics 4
- MATH 170 Analytic Geometry and Calculus I 4
- MATH 190 Analytic Geometry and Calculus II 4
- MATH 220 Analytic Geometry and Calculus III 4

**ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University – Dominguez Hills**

(General Physics Option)

- PHYS 203 Engineering Physics 4
- CHEM 111 General Chemistry 5
- CIS 171 Visual Basic Programming 3

Note: Physics articulation is approved as a sequence only

**California State University – Fullerton**

- PHYS 203 Engineering Physics 4
- CHEM 111 General Chemistry 5
- CHEM 112 General Chemistry 5

**California State University – Long Beach**

- PHYS 203 Engineering Physics 4
- BIOL 120 Introduction to Biological Science 4
- or BIOL 200 Principles of Biology 5
- and BIOL 201 Principles of Biology 5
- CHEM 111 General Chemistry 5
- CHEM 112 General Chemistry 5
California State University – Los Angeles
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5
*MATH 240 Calculus and Differential Equations 4

*MATH 240 is required for BA in Physics only. Students are advised to complete ENGL 103 as their CSU GE Critical Thinking requirement. This will meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

California State Polytechnic University – Pomona
PHYS 203 Engineering Physics 4
BIOL 120 Introduction to Biological Science 4
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5
CIS 180 Programming in C/C++ 3
or CIS 178 Programming in Fortran (3)
MATH 240 Calculus and Differential Equations 4

University of California – Irvine
PHYS 203 Engineering Physics 4
CIS 180 Programming in C/C++ 3
or CIS 280 Object-Oriented Programming in C++ (3)
MATH 240 Calculus and Differential Equations 4

Required courses: one year calculus and one year of calculus-based physics with laboratory for engineering and Physics major. Concentrations are offered in: Applied Physics, Biomedical Physics, Computational Physics, Philosophy of Physics, Physics Education and Astrophysics. See counselor for specific concentration requirements.

University of California – Los Angeles
PHYS 203 Engineering Physics 4
CHEM 111 General Chemistry 5
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: Physics graduates with their Bachelor's Degrees qualify for graduate studies in Physics. 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)
VERIFICATION OF COMPLETION
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

Inspection and Testing Specialty
PMT 63L Specialty Plastics Lab .5
PMT 100 Plastics I 2.5
MET 120 Nondestructive Testing 3

Injection Molding Specialty
PMT 59 Injection Molding I 2.5
PMT 63L Specialty Plastics Lab .5
PMT 100 Plastics I 2.5

Injection Molding Specialty
PMT 59 Injection Molding I 2.5
PMT 63L Specialty Plastics Lab .5
PMT 100 Plastics I 2.5

Moldmaking Specialty
PMT 59 Injection Molding I 2.5
PMT 63L Specialty Plastics Lab .5
PMT 100 Plastics I 2.5

Fiberglass Specialty
PMT 61 Fiberglass I 2.5
PMT 63L Specialty Plastics Lab .5
PMT 67 Fiberglass II 2.5

Composites Specialty
PMT 61 Fiberglass I 2.5
PMT 67 Fiberglass II 2.5
PMT 70 Composites Technology 2.5

Fiberglass/Composite Repair Specialty
PMT 53 Composite Repair 3
PMT 61 Fiberglass I 2.5
PMT 67 Fiberglass II 2.5

Tooling Specialty
PMT 63L Specialty Plastics Lab .5
PMT 72 Tooling for Plastics 2.5
PMT 221 Tooling 2.5

PLASTICS/COMPOSITES MANUFACTURING TECHNOLOGY CERTIFICATE OF ACHIEVEMENT PROGRAM

<table>
<thead>
<tr>
<th>CORE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>PMT 100 Plastics I</td>
<td>2.5</td>
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<tr>
<td>TM 50 Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 147 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 148 Effective Business Presentations</td>
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Composites Manufacturing Option

<table>
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<th>Title</th>
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<tbody>
<tr>
<td>PMT 61</td>
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<tr>
<td>PMT 63L</td>
<td>Specialty Plastics Lab</td>
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<tr>
<td>PMT 67</td>
<td>Fiberglass II</td>
<td>2.5</td>
</tr>
<tr>
<td>PMT 68</td>
<td>Plastics Materials and Processes</td>
<td>2.5</td>
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<tr>
<td>PMT 70</td>
<td>Composites Technology</td>
<td>2.5</td>
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<tr>
<td>ENGT 116</td>
<td>Blueprint Reading for Machine Trades</td>
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Total Units (including CORE) = 24

Composites Inspection Option

<table>
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<tbody>
<tr>
<td>PMT 61</td>
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<td>PMT 63L</td>
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<tr>
<td>PMT 67</td>
<td>Fiberglass II</td>
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<tr>
<td>PMT 70</td>
<td>Composites Technology</td>
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</tbody>
</table>

Total Units (including CORE) = 25

Plastic/Composite Tool Design Option

<table>
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<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PMT 65</td>
<td>Moldmaking I</td>
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</tr>
<tr>
<td>PMT 72</td>
<td>Tooling for Plastics</td>
<td>2.5</td>
</tr>
<tr>
<td>ENGT 138</td>
<td>AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 258</td>
<td>Design and Production Technology with AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 123</td>
<td>Descriptive Geometry</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units (including CORE) = 28

Plastics Manufacturing Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMT 4</td>
<td>Plastics III</td>
<td>2.5</td>
</tr>
<tr>
<td>PMT 59</td>
<td>Injection Molding I</td>
<td>2.5</td>
</tr>
<tr>
<td>PMT 60</td>
<td>Extrusion</td>
<td>3</td>
</tr>
<tr>
<td>PMT 61</td>
<td>Fiberglass I</td>
<td>2.5</td>
</tr>
<tr>
<td>PMT 63L</td>
<td>Specialty Plastics Lab</td>
<td>0.5</td>
</tr>
<tr>
<td>PMT 64</td>
<td>Plastics II</td>
<td>2.5</td>
</tr>
<tr>
<td>PMT 66</td>
<td>Hydraulics and Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>PMT 68</td>
<td>Plastics Materials and Processes</td>
<td>2.5</td>
</tr>
<tr>
<td>PMT 71</td>
<td>Plastics IV</td>
<td>2.5</td>
</tr>
<tr>
<td>PMT 72</td>
<td>Tooling for Plastics</td>
<td>2.5</td>
</tr>
</tbody>
</table>

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 116, (for Composite Manufacturing, Composite Inspection and Plastics Manufacturing Options Only), (3) the Associate in 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

Common Lower Division Major Preparation for California State University and University of California

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 101</td>
<td>American Political Institutions</td>
<td>3</td>
</tr>
<tr>
<td>or POL 201</td>
<td>Introduction to Political Science and American Government</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Additional Lower Division Major Preparation for Specific Transfer Institutions

California State University – Dominguez Hills

No lower division courses are specified as required for the Political Science major at CSUDH. Students planning to transfer to CSUDH and major in Political Science are recommended to take POL 101, POL 210, and POL 220 in preparation for upper division coursework in the major.

California State University – Fullerton

In addition to the common lower division major preparation listed above, the Political Science major at CSUF also includes a lower division Study of Politics or Methods and Skills in Political Science course not offered at Cerritos College.

California State University – Long Beach

Students planning to transfer to CSULB and major in Political Science should select POL 101.

Concentration in Global Politics:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 210</td>
<td>Comparative Government</td>
<td>3</td>
</tr>
<tr>
<td>or POL 220</td>
<td>International Relations</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>PSYC 210</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

Students planning to transfer to CSULA and major in Political Science should take both POL 101 and POL 201. In addition, students are advised to complete ENGL 103 as their CSU GE Critical Thinking requirement. This will meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

University of California – Irvine

Please see the website www.assist.org for information about the Political Science major at UCI, including appropriate lower division courses.

University of California – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 210</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POL 220</td>
<td>Comparative Government</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to the lower division major preparation already listed, the Political Science major at UCLA requires a lower division Introduction to Statistical Reasoning class, and either an Introduction to Political Theory or a Politics and Strategy course, which are not offered at Cerritos College. Students may need to take the courses at another community college to be competitive for admission to the major.
University of California – Riverside

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 210</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POL 220</td>
<td>Comparative Government</td>
<td>3</td>
</tr>
</tbody>
</table>

RECOMMENDED:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

Students planning to transfer to UCR and major in Political Science should select POL 101. The Political Science major at UCR also includes a lower division Modern 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. Please see a counselor or the website www.assist.org for more information on appropriate courses for those emphases.

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.
See State University General Education List.

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 course work, which could transfer to an accredited four-year college. All courses considered for acceptance must have obtained at an institution or institutions accredited by a nationally recognized agency.

COMMON LOWER DIVISION PREPARATION FOR CHIROPRACTIC SCHOOLS:

<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>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>or ENGL 103</td>
<td>Critical and Argumentative Writing</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>

THE REQUIREMENTS FOR CHIROPRACTIC SCHOOLS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

CAREER OPPORTUNITIES: Job prospects are expected to be good for persons who enter the practice of chiropractic. Employment of chiropractors is expected to grow faster than the average for all occupations, through the year 2014 as consumer demand for alternative healthcare grows. The rapidly expanding older population, with their increased likelihood of mechanical and structural problems, also will increase demand. Demand for chiropractic treatment is also related to the ability of patients to pay, either directly or through health insurance. In this occupation, replacement needs arise almost entirely from retirements. Chiropractors usually remain in the occupation until they retire; few transfer to other occupations. Establishing a new practice will be easiest in areas with a low concentration of chiropractors.
PRE-DENTAL
CAREER PATHWAY

The following curriculum does not lead to an Associate in Arts Pre-Dental 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 dental school is highly competitive. Most schools of dentistry admissions are based primarily on the candidates’ academic achievement in a college program and performance in the Dental Admissions Test (DAT). The DAT measures general academic ability, reading comprehension, vocabulary, analytical thinking, comprehensive scientific information and perceptual ability. 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. However, there are Dental Schools which consider 90 semester units (60 units lower division and 30 units of upper division coursework) with a very competitive grade point average (GPA) as the minimum requirement for admission.

COMMON LOWER DIVISION PREPARATION
FOR DENTAL SCHOOLS

<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>ENGL 100</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 103</td>
<td>(3)</td>
</tr>
<tr>
<td>or PHYS 101</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 102</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 201</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 202</td>
<td>4</td>
</tr>
</tbody>
</table>

PSYC 101, General Introductory Psychology is required by many dental schools.

ADDITIONAL SCIENCES: It is strongly suggested that students take additional science courses at the university, such as Anatomy/Physiology/Human Biology, Biochemistry, Botany, Cellular Biology, Comparative Anatomy, Embryology, Genetics, Histology, Microbiology, and Molecular Biology. Some of these courses may be considered additional requirements or elective coursework.

MATHEMATICS: The mathematics requirement beyond trigonometry will be determined by the major course of study the student elects to pursue.

RECOMMENDED COURSEWORK: Lower division courses that may be taken are College Algebra/Calculus/Statistics, Business Management, Accounting/Economics, Technical Writing, Speech, Sociology/ Anthropology, Foreign Language and Ceramics/Sculpture.

For expanded information about dental school requirements, students are encouraged to consult “ASDA Handbook: A Resource Guide for Predental, Students”, or on the Internet for the American Dental Education Association at www.ada.org or Dental Admission Test (DAT) information at www.ada.org/profied/testing/dat/index.asp.

For accurate programming and more school-specific 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.ucladent.dent.ucla.edu/
- University of California, San Francisco
  www.dentistry.ucsf.edu/ and/or www.assist.org
- University of the Pacific, San Francisco Campus
  www.dental.pacific.edu/
- University of Southern California
  www.usc.edu/hsc/dental

THE REQUIREMENTS FOR DENTAL SCHOOLS ARE SUBJECT TO CHANGE WITHOUT ADVANCE NOTICE.

CAREER OPPORTUNITIES: Dentists diagnose and treat problems with teeth and tissues in the mouth, along with giving advice and administering care to help prevent future problems. Most dentists are general practitioners, handling a variety of dental needs. Other dentists practice in any of nine specialty areas. Orthodontist, the largest group of specialists, prevents or corrects irregularities of the teeth. The next largest group, oral and maxillofacial surgeons, operates on the mouth and jaws. The remainder may specialize as pediatric dentists (focusing on dentistry for children); periodontists (treating gums and bone supporting the teeth); prosthodontists (replacing missing teeth with permanent fixtures, such as crowns and bridges, or with removable fixtures such as dentures); or oral and maxillofacial radiologists (diagnosing diseases in the head and neck through the use of imaging technologies). 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. Median annual earnings of salaried dentists were $136,960 in May 2006. Earnings vary according to number of years in practice, location, hours worked, and specialty. Self-employed dentists in private practice tend to earn more than do salaried dentists, and a relatively large proportion of dentists are self-employed.

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

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**

<table>
<thead>
<tr>
<th>MOST MEDICAL SCHOOLS</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>BIOL 202 Molecular Biology/Genetics (highly recommended)</td>
<td>4</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>CHEM 205 Quantitative Analysis (highly recommended)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 212 Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 100 Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 102 Freshman Composition &amp; Literature</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 103 Critical and Argumentative Writing</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 201 Engineering Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>PHYS 102 General Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 202 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 even a few 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.med.uci.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.medschool.ucsf.edu
- U.S.C. Keck School of Medicine
  www.usc.edu/schools/medicine
- Western University of Health Sciences/
  College of Osteopathic Medicine of the Pacific
  www.westernu.edu

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 faster than the average for all occupations through
the year 2016 due to the continued expansion of health career 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 under-served 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. Because admission has become increasingly more difficult, having completed the equivalent of a bachelor’s degree is now imperative for the two California Schools of Optometry. The bachelor's degree may be in any major of the student's choice. Besides the bachelor's degree being important, college grades (GPA) and the Optometry Admission Test (OAT) scores are used in preliminary screening. The OAT which has traditionally been administered in October and February is usually taken in the fall of the junior year. It is now being offered as a computerized test at Prometric Testing Centers. The OAT evaluates the following knowledge: 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., Suite 600, Chicago, IL 60611; Telephone (800) 232-2159; www.opted.org. Finally, a volunteer experience with an optometrist is highly appropriate in the preparation for optometry school. First, as a prospective optometry professional, you gain valuable insight into your decision whether optometry is the career path for you. Second, you develop the opportunity to receive a letter of support from an optometry professional, a vital element of your application.

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 to the American Optometric Association, 243 N. Lindbergh Blvd., St. Louis, MO 63141. Another valuable source of information is the Association of Schools and Colleges of Optometry, www.opted.org or UC Berkeley Optometry Club called Foresight at http://optometry.berkeley.edu/~foresite/. Information on UC Berkeley's pre-professional preparation coursework can be found at www.assist.org, and www.scco.edu for Southern California College of Optometry in Fullerton.

COMMON LOWER DIVISION PREPARATION FOR SCHOOLS OF OPTOMETRY

<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>CHEM 211</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 112</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MIRC 200</td>
<td>Principles &amp; Applications of Microbiology</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>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION PREPARATION FOR SPECIFIC SCHOOLS OF OPTOMETRY

Southern California College of Optometry, Fullerton

www.scco.edu

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 150</td>
<td>Personal &amp; Social Adjustment</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 251</td>
<td>Developmental Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>or PSYC 261</td>
<td>Social Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>or PSYC 271</td>
<td>Abnormal Psychology</td>
<td>(3)</td>
</tr>
</tbody>
</table>

SCCO allows you to repeat the OAT exam an unlimited number of times, but you must wait at least 90 days between testing dates (the 90-day wait includes any combination of written and computerized tests). SCCO will receive the computerized scores within three weeks after the test has been taken. For entry in 2008, the OAT must be completed by March 2008.

Besides the bachelor's degree and the Optometry Admission Test results, all applicants 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. If the applicant meets the academic and personal criteria of the preliminary screening, they will be invited for a personal interview on campus.

For the class of 2010, 99 students were admitted from an applicant pool of 549. The average G.P.A. of the ninety-eight students admitted was 3.37 G.P.A.

University of California – Berkeley

http://optometry.berkeley.edu

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry</td>
<td>4</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>
</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, and BIOL 202, Molecular Biology/Genetics. Biochemistry was required as of Fall 2003/Spring 2004. It is taught at most universities and also required as an upper division course.

ADDITIONAL COURSES STRONGLY RECOMMENDED for application to the School of Optometry: Upper division Genetics, Physiology of the Aging Process, Cell Biology of the Eye and Mechanisms of Ocular Disease, Molecular & Cell Biology, and Integrative Biology.

The minimum of a bachelor's degree or its equivalent is now required for admission to UCBSO. Besides the additional science classes, the grade point average is extremely important. UCBSO expects the OAT to be taken only online. Testing is available year round and an examinee can select the date, time, and place to test. In addition, examinees receive their scores immediately after the completion of the test at the test center. But, Applicants who sit for the OAT after December 1st will not be considered for Fall admission to Berkeley Optometry admissions cycle.

For the 2007 cohort, sixty students were admitted with an average 3.5 G.P.A. in prerequisite courses only. The average OAT score was 357 in all subjects. The range of OAT lowest scores was 310 and the high score was 390. 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 may practice in specialties such as binocular disorders, contact lenses, low vision, ocular disease, geriatrics, pediatrics, or refractive surgery. They prescribe treatment such as/or corrective lenses, contact lenses, laser procedures 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 are expected to grow as fast as average for all occupations through 2016. Increased incidences of diabetes and hypertension in the general population as well as in the elderly will generate greater demand for optometric services as these diseases often affect eyesight. Also, the need to replace optometrists who retire or leave the occupation for other reasons will create more employment opportunities. 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 optometry needs with each patient. Also, new surgical procedures using lasers are available that can correct some visions problems, and although optometrists still will be needed to provide preoperative and postoperative care for laser surgery patients, patients who successfully undergo this surgery may not require optometrists to prescribe glasses or contacts for several years. The need to replace optometrists who retire or leave the occupation for another reason will create the predominant source of employment opportunities. According to the American Optometric Association, median net annual income for all optometrists, including the self-employed was $105,000 in 2006. The middle 50 percent earned between $84,000 and $150,000.

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

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 Name</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 &amp; Literature</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 103</td>
<td>Critical and Argumentative Writing</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 CALIFORNIA PHARMACY SCHOOLS

Loma Linda University – School of Pharmacy
www.llu.edu/llu/psps

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 78 semester units of a pre-pharmacy program of study. To be eligible for admission applicants must have a minimum cumulative undergraduate as well as cumulative science/math GPA of 2.75 at the time of application. 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A &amp; P 200</td>
<td>Human Anatomy (as of entry 2006)</td>
<td>5</td>
</tr>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MICRO 200</td>
<td>Principles &amp; Applications of Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 02</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 100</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Humanities/Fine Arts 12 Units

Select from: literature, philosophy, religion, ethics, foreign language, preferably Spanish, cultural diversity, performing arts, visual arts, fine arts, history or civilization.

Social Sciences/Behavioral Sciences 12 Units

Include one semester of economics (macro or micro) and one semester of general 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 1,278 applications received. Number of applicants invited to interview was 225 of which 100% had a bachelor’s degree. Thirty students were admitted to the graduating class of 2011.
The average overall G.P.A. of the students admitted was 3.66.

**ECON 201**  Principles of Macroeconomics  3
or **ECON 202**  Principles of Microeconomics  (3)

**MATH 190**  Analytic Geometry and Calculus II  4
**PHYS 201**  Engineering Physics  4
or **PHYS 101**  General Physics  (4)
**PHYS 202**  Engineering Physics  4
or **PHYS 102**  General Physics  (4)

**MICR 200**  Principles & Applications of Microbiology  5
**PHYS 101**  General Physics  4
or **PHYS 100**  Elementary Physics  (4)
**PSYC 101**  General Introductory Psychology  3
or **PSYC 271**  Abnormal Psychology  (3)
**SPCH 130**  Fundamentals of Speaking  3

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 applicants who have fulfilled only minimum requirements. The School of the minimum required would be considered more favorably than applicants who have completed units in excess of 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.

**A&P 201**  Human Physiology  5
or **ECON 201**  Principles of Macroeconomics  3
or **ECON 202**  Principles of Microeconomics  (3)

**MATH 190**  Analytic Geometry and Calculus II  4
**PHYS 201**  Engineering Physics  4
or **PHYS 101**  General Physics  (4)
**PHYS 202**  Engineering Physics  4
or **PHYS 102**  General Physics  (4)

**PSYC 101**  General Introductory Psychology  3
or **SOC 101**  Introductory Sociology Principles  (3)
or **ANTH 100**  Cultural Anthropology  (3)
**SPCH 130**  Fundamentals of Public Speaking  3
or **SPCH 235**  Fundamentals of Argumentation & Persuasion  (3)

HUMANITIES/FINE ARTS: Two Additional courses 3-3

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. 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 repeated if they are 9 years or older at the time the application is submitted: mammalian physiology, microbiology, 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.

**A&P 201**  Human Physiology  5
**BIOL 202**  Molecular Biology/Genetics  4
**ECON 201**  Principles of Macroeconomics  3
or **ECON 202**  Principles of Microeconomics  (3)

**MATH 112**  Elementary Statistics  4
**MICR 210**  Concepts in Microbiology  5
**PHYS 201**  Engineering Physics  4
or **PHYS 101**  General Physics  (4)
**PHYS 202**  Engineering Physics  4
or **PHYS 102**  General Physics  (4)
**PSYC 101**  General Introductory Psychology  3
or **SOC 101**  Introductory Sociology Principles  (3)

HUMANITIES/FINE ARTS: Two Additional courses 3-3

SOCIAL/BEHAVIORAL SCIENCE: Two Additional courses 3-3

**SPCH 100**  Fundamentals of Oral Communication  3
or **SPCH 120**  Interpersonal Communication  (3)

The following required upper division courses are not offered at Cerritos College, but must be taken at another college or university: Biochemistry, Molecular Biology and Mammalian Physiology.

RECOMMENDED COURSE: Any Computer Science class
Minimum of 60 semester units is required. Candidates who have received a baccalaureate degree will be considered more favorably than applicants who have fulfilled only minimum requirements. Complete prerequisites with a “C” or better. All prerequisite coursework in progress must be completed no later than the spring semester or quarter immediately preceding matriculation. Summer session courses taken immediately prior to matriculation at Western University of Health Sciences are not accepted. Students must have a minimum cumulative and science grade point average of 2.5 in order to apply.

For the entering class of fall 2007, 120 students were admitted from an applicant pool of 1,591 students. The average cumulative grade point average was 3.33 and the average science grade point average was 3.20. Applicants must submit an application by March 1 of the year prior to admission and participate in an admission interview and assessment of written and verbal communication skills.

A&P 200 Human Anatomy 5
A&P 201 Human Physiology 5
MICR 200 Principles & Applications Microbiology 5
SPCH 100 Fundamentals of Oral Communication 3
or SPCH 120 Fundamentals of Interpersonal Communication (3)
or SPCH 130 Fundamentals of Speaking (3)

Besides the required courses listed the student must have at least 20 additional units from natural sciences, humanities/fine arts, and behavioral and social sciences. Electives must be met from at least two of the three following areas: Public Speaking/Debate, Social Sciences, to include Economics.

The following required coursework is not offered at Cerritos College, but must be taken at another college or university: Biochemistry (2 semesters) or Biochemistry (1 semester) and Molecular Biology (1 semester).

Advanced Placement, Transfer of Credit, CLEP or Credit for Experiential learning is not recognized by the program.

THE REQUIREMENTS FOR PHARMACY SCHOOLS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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 100</td>
<td>Introductory Chemistry</td>
</tr>
<tr>
<td>or CHEM 111</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
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<td>PHYS 102</td>
<td>General Physics</td>
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<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 Kinesiology (Exercise Science), in order to apply. Suggested coursework preparation to meet program prerequisite:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<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>A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
</tr>
<tr>
<td>or A&amp;P 200</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
</tr>
</tbody>
</table>

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>or A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
</tr>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
</tr>
<tr>
<td>or A&amp;P 151</td>
<td>Introduction to Human Physiology</td>
</tr>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
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<tr>
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<td>General Chemistry</td>
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<td>CHEM 112</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Precalculus Mathematics</td>
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<td>General Physics</td>
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<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, 1101 Vermont Avenue, Washington, DC 20005. telephone: (877) 862-2740.

COMMON LOWER DIVISION PREPARATION FOR 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>
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<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
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<td>CHEM 211</td>
<td>Organic Chemistry</td>
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<td>CHEM 212</td>
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<td>MATH 112</td>
<td>Statistics</td>
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<td>PHYS 101</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION PREPARATION FOR SPECIFIC INSTITUTIONS
University of California, Davis – School of Veterinary Medicine
www.vetmed.ucdavis.edu/studentprograms

Students are admitted to this school in the fall semester only. 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 life/health sciences: biology, animal science, zoology, and Natural/Environmental Sciences are the most common and popular majors. Academic performance is the major factor in admission selection for the UC Davis Veterinary School. Most successful applicants have their coursework with a grade point average of 3.5 – 4.0. The GRE is the graduate record exam, which is required by this veterinary school. If the GRE has been taken more than once, the highest score in every section will be used. Scores from the Graduate Record Examination must be taken by October 1st. The school believes the best predictors of how successful an applicant will be in completing the veterinary curriculum are the grade point average and GRE. Extracurricular activities and substantial experience with animals, which should include working or volunteer experience with veterinarians, a minimum of 180 veterinary experience hours is required. 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

Two to three English courses should total a minimum of 8 semester units or 12 quarter units. The following required upper division courses are not offered at the lower division level and must be taken at the university: Biochemistry, Genetics, and Systemic Physiology.

The following are the application statistics for the class of 2011: From an applicant pool of 1120 only 131 students were accepted. Of the 131 applicants accepted 127 had bachelor degrees only 4 had no degree. The average cumulative GPA was 3.47, required science 3.3. The average GRE scores were 574/75% on Verbal and 702/70% on Quantitative and 5.0/67% on Analytical Writing. The average number of Veterinary-related experience hours at the time of application was 3,000. The university with the most applicants accepted to the veterinary school was UC Davis. Other universities which had high numbers admitted were UC San Diego, Cal Poly San Luis Obispo, Cal Poly Pomona, and UC Santa Barbara and Santa Cruz.

Western University of Health Sciences – College of Veterinary Medicine
www.westernu.edu/xp/edu/veterinary/home.xml

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 614 applications received. The cumulative grade point average was 3.22 and prerequisite grade point average was 3.26. 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.

ANTH 100 Cultural Anthropology 3
or ECON 201 Principle of Macroeconomics (3)
BIOL 202 Molecular Biology/Genetics 4
ENGL 100 Freshman Composition 4
ENGL 105 Technical Writing 3
HO 152 Normal &Therapeutic Nutrition 3
HUMANITIES / SOCIAL SCIENCES 6
MICR 200 Principles & Applications of Microbiology 5
PSYC 101 General Introductory Psychology 3
or SOC 101 Introductory Sociology Principles (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, Mammoology, Parasitology, Reproduction, Toxicology, Pharmacology, Physiology, or Zoology.)

For more school specific information concerning the requirements at individual out of state schools look up the specific veterinary school website. We have provided a few examples of the 28 out of state school sites:

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.oregonstate.edu/vetmed
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 as fast as the average for most occupations through the year 2016. Despite this average growth, good job opportunities are expected because the 28 USA schools of veterinary medicine, of which only 2 are in California, even at full capacity, result in a limited number of graduates each year. For the most part veterinarians tend to practice in animal hospitals or clinics and care primarily for companion animals.

The majority of veterinarians in the United States 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 companion pets and because many veterinarians do not want to work in rural or isolated areas. The number of jobs for large-animal veterinarians is likely to grow more slowly than that for veterinarians in private practice that cares for companion animals. Nevertheless, job prospects may be better for veterinarians who specialize in farm animals than for companion-animal practitioners because of low earnings in the former specialty and because many veterinarians do not want to work in rural or isolated areas. Veterinarians with training in food safety, animal health and welfare, and public health and epidemiology should have the best opportunities for a career in the Federal Government.

According to a survey by the American Veterinary Medical Association, average-starting salaries of veterinary medical college graduates ranged from $40,130 - $61,029. The salary ranged in 2006 from $56,450 to $94,880. The median annual earnings of veterinarians was $71,990. The average annual salary for experienced veterinarians in the Federal Government in non-supervisory and managerial positions was $84,335 in 2007.

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

**PSYCHOLOGY TRANSFER PROGRAM**

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
</tr>
</tbody>
</table>

**ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS**

**California State University – Dominguez Hills**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 210</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>or MATH 112</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>PSYC 220</td>
<td>Research Methods</td>
</tr>
</tbody>
</table>

**California State University – Long Beach**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>PSYC 210</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>or MATH 112</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>PSYC 220</td>
<td>Research Methods</td>
</tr>
<tr>
<td>PSYC 241</td>
<td>Introduction to Psychobiology</td>
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</table>

**California State University – Fullerton**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>PSYC 210</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>PSYC 220</td>
<td>Research Methods</td>
</tr>
</tbody>
</table>

**California State University – Los Angeles**

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>PSYC 241</td>
<td>Introduction to Psychobiology</td>
</tr>
<tr>
<td>PSYC 210</td>
<td>Elementary Statistics</td>
</tr>
</tbody>
</table>

**University of California – Los Angeles**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ANTH 115</td>
<td>Physical Anthropology</td>
</tr>
<tr>
<td>A&amp; P 120</td>
<td>Introduction to Human Anatomy and Physiology</td>
</tr>
<tr>
<td>or BIOL 120</td>
<td>Introduction to Biological Science</td>
</tr>
<tr>
<td>or BIOL 200</td>
<td>Principles of Biology</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>Introductory Chemistry</td>
</tr>
<tr>
<td>or CHEM 110</td>
<td>Elementary Chemistry</td>
</tr>
<tr>
<td>or CHEM 111</td>
<td>General Chemistry or H.S. CHEM completed with a “C” or better</td>
</tr>
<tr>
<td>PSYC 210</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>or MATH 112</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>or MATH 115</td>
<td>Finite Mathematics</td>
</tr>
<tr>
<td>or CIS 280</td>
<td>Object-Oriented Programming in C++</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>Analytic Geometry and Calculus 1</td>
</tr>
<tr>
<td>or MATH 116</td>
<td>Calculus for Managerial Biological and Social Sciences</td>
</tr>
<tr>
<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>or PHIL 102</td>
<td>Introduction to Ethics</td>
</tr>
<tr>
<td>or PHIL 106</td>
<td>Introduction to Logic</td>
</tr>
<tr>
<td>or PHIL 103</td>
<td>Philosophical Reasoning: Critical Thinking in Philosophy</td>
</tr>
<tr>
<td>PHYS 100</td>
<td>Elementary Physics</td>
</tr>
<tr>
<td>or PHYS 101</td>
<td>General Physics</td>
</tr>
<tr>
<td>or PHYS 201</td>
<td>Engineering Physics</td>
</tr>
</tbody>
</table>

**University of California – Irvine**

In fulfillment of the requirements below, a single course may be used only once.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry &amp; Calculus I</td>
</tr>
<tr>
<td>and PSYC 210</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>or MATH 112</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
</tr>
<tr>
<td>and PSYC 241</td>
<td>Introduction to Psychobiology</td>
</tr>
<tr>
<td>and PSYC 261</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>or PSYC 271</td>
<td>Abnormal Psychology</td>
</tr>
</tbody>
</table>

**One Course from:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 150</td>
<td>Personal and Social Adjustment</td>
</tr>
<tr>
<td>PSYC 210</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>PSYC 220</td>
<td>Research Methods</td>
</tr>
<tr>
<td>PSYC 241</td>
<td>Introduction to Psychobiology</td>
</tr>
<tr>
<td>PSYC 251</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>PSYC 261</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSYC 271</td>
<td>Abnormal Psychology</td>
</tr>
</tbody>
</table>

**Two of the following:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>or ANTH 115</td>
<td>Physical Anthropology</td>
</tr>
<tr>
<td>ECON 101</td>
<td>US &amp; Global Economy</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
</tr>
</tbody>
</table>
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)
CHEM 112 General Chemistry (5)

PHYS 201 Engineering Physics (4)

and PHYS 202 Engineering Physics 4

and PHYS 203 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 AA 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 students for an AA degree. Students interested in preparing for a Bachelor of Arts degree at a four-year college are referred to the Theater Arts Transfer Program.

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: 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.

RADIO/TELEVISION BROADCASTING

The following Broadcast Media program of study has been designed to prepare students for an AA degree. Students interested in preparing for a Bachelor of Arts degree at a four-year college are referred to the Theater Arts Transfer Program.

BROADCAST MEDIA

26.5 UNITS

COMPLETE 20.5 CORE UNITS

JOUR 101 Beginning Newswriting and Reporting 3
JOUR 121 Multimedia Reporting 3
JOUR 122 Creating Podcasts for Media 1
JOUR 170 Broadcast News/Webcasting 1

or RTV 170 Broadcast News/Webcasting 1

RTV 151 Motion Pictures, Radio and TV (1)

RTV 152 Introduction to Broadcasting 3
TH 156 Television Production 2.5

RTV 155 Radio Production 3

RTV 298 Directed Studies in Radio-TV 1

or RTV 171 Occupational Work Experience in Radio-TV (1)

PLUS A MINIMUM OF 6 UNITS FROM THE FOLLOWING

MUS 146 Recording Techniques 3

RTV 255 Editing Audio 3

SPCH 140 Oral Interpretation of Literature 3

SPCH 145 Storytelling 3

SPCH 271 Voice and Articulation 3

TH 241 Screenwriting 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 VERIFICATION OF COMPLETION

This verification helps the student focus on the study of and preparation for entry level employment in the field of broadcast advertising at radio and television stations, and in online broadcast ventures. This verification is one of two-part verification combination that will begin to prepare the student for an Associate in Arts in Broadcast Media. (See JOUR 141 – Broadcast Journalism)

RADIO/TELEVISION BROADCAST ANNOUNCING

14.5 UNITS

RTV 152 Introduction to Broadcasting 3
RTV 155 Radio Production 3
TH 156 Television Production 2.5

or RTV 170 Broadcast News/Webcasting 1

JOUR 122 Creating Podcasts for Media 1

JOUR 170 Broadcast News/Webcasting 1

SPCH 40 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) AA degree general education requirements.

SECURITY MANAGEMENT CORE

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
VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS

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 Verification 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 MAJOR 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:

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
SOC 220 Introduction to Human Services 3

Additional recommended coursework that will be considered advantageous; Any Ethnic Studies, Women Studies, and Gerontology.

The Bachelor of Arts in Social Work 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. Examples of such criteria include a supplementary application, two letters of reference (one academic and one professional), and documented exposure to the field of Social Work in a variety of settings such as work or volunteer experience. Please refer to the admissions web site for impaction admission details www.csulb.edu/depts/enrollment/admissions/impacted_major.html.

California State University – Los Angeles:

PSYC 101 General Introductory Psychology 3
or SOC 101 Introductory Sociology Principles (3)
MATH 112 Elementary Statistics 4
or PSYC 210 Elementary Statistics (4)

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.

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
SOCIOL OGY
TRANSFER PROGRAM

COMMON LOWER DIVISION MAJOR PREPARATION
FOR CALIFORNIA STATE UNIVERSITY
AND UNIVERSITY OF CALIFORNIA

SOC 101 Introductory Sociology Principles 3
MATH 112 Elementary Statistics
or PSYC 210 Elementary Statistics 4

Recommended Electives
ANTH 100 Cultural Anthropology 3
PSYC 101 General Introductory Psychology
SOC 201 Social Problems 3

ADDITIONAL LOWER DIVISION MAJOR PREPARATION
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills
No other requirements other than the common lower-division preparation.

California State University – Fullerton
A total of 9 units of Sociology course work may be transferred.
SOC 250 Sociology of Aging 3

All courses counting toward the major must be taken for a letter grade.

California State University – Los Angeles
No other requirement other than the common lower division preparation.
Students who transfer without having completed CERRITOS’ SOC 101 and MATH 112 are strongly recommended to include the CSULA comparable courses among their first courses at CSULA. Students are advised to complete ENGL 103 as their CSU GE Critical Thinking requirement. This will meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement. See Counselor and www.assist.org for more details.

California State University – Long Beach
Recommended Electives:
ANTH 100 Cultural Anthropology 3
SOC 201 Social Problems 3

University of California – Irvine
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 (3.5)

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)
or 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
Two additional lower division sociology courses. 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 MAJOR PREPARATION
FOR CALIFORNIA STATE UNIVERSITY

SPAN 101 Elementary Spanish 5
SPAN 102 Elementary Spanish 5
SPAN 201 Intermediate Spanish 5
SPAN 202 Intermediate Spanish 4

ADDITIONAL LOWER DIVISION MAJOR PREPARATION
FOR SPECIFIC TRANSFER INSTITUTIONS

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.
Curricula, Requirements for Majors, Certificates and Transfer Programs

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 281 Beginning Conversational Spanish
or SPAN 282 Intermediate Conversational Spanish
or SPAN 283 Advanced Conversational Spanish

California State University – Long Beach

Students who have completed sufficient high school Spanish or equivalent may take upper-division courses as soon as proficiency requirements have been met. In addition to the common lower division major preparation previously listed, two years 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 at CSULA as the prerequisite for their writing proficiency requirement.

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 VERIFICATION OF COMPLETION

A Verification of Completion shall be awarded to the student who completes with a grade of “C” or higher the following courses:

DIVISION/DEPARTMENT REQUIREMENTS UNITS
Choose 15 units from any of the following courses
S PCH 110 Intercultural Communication 3
S PCH 120 Fundamentals of Interpersonal Communication 3
S PCH 130 Fundamentals of Speaking 3
S PCH 132 Fundamentals of Small Group Communication 3
S PCH 150 Organizational Communication 3
S PCH 200 Contemporary Communication Topics 3

TOTAL VERIFICATION REQUIREMENTS 15

SPEECH TRANSFER PROGRAM

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS UNITS
California State University – Fullerton Bachelor of Arts in Speech Communication, Human Communication Studies.
S PCH 130 Fundamentals of Speaking 3
For Bachelor of Arts in Communication – see a counselor

California State University – Long Beach Bachelor of Arts in Speech Communication Options in General Speech, Interpersonal and Organizational Communication and Rhetorical Studies
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:
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 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 AA Degree.

REQUIRED COURSES:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CD 110</td>
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</tr>
<tr>
<td>CDEC 113</td>
<td>3</td>
</tr>
<tr>
<td>EDT 104</td>
<td>2</td>
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<tr>
<td>SLP 100</td>
<td>3</td>
</tr>
<tr>
<td>SLP 110</td>
<td>4</td>
</tr>
<tr>
<td>SLP 125</td>
<td>5</td>
</tr>
<tr>
<td>Total Certificate Requirements</td>
<td>21</td>
</tr>
</tbody>
</table>

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.
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.calteacher.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.ctc.nesinc.com.

Students who wish to obtain a teaching credential in the State of California, should seek the pre-professional subject matter preparation for elementary school teaching at the university of their choice and are recommended to take the California Basic Educational Skills Test (CBEST) as 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
English 103
Biology 120 (Except CSU Los Angeles)
History 102
History 120 (Except CSU Los Angeles)
Geography 105 (Except CSU Los Angeles)
Child Development 110
Speech 130
Earth Science 110
Math 110A and 110B (Except CSU Fullerton)
Political Science 101
History 245
Music 105 (Except CSU Los Angeles)
**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
- Speech 103
- Any Plan B Physical Science (ESCI 110 or PS 112 recommended)
- Biology 120
- Math 110A
- Art 100
- Music 105 or PE 191
- English 222
- History 101, 102, or 103
- Political Science 101 or 201
- GEOG 105
- CD 110

**LIBERAL STUDIES (B.A.): INTEGRATED OPTION**

*The Liberal Studies: Integrated Option (INTOP) makes available an accelerated program combining the requirements for a bachelors degree and a multiple subject teaching credential. Participants complete undergraduate Liberal Studies and post-baccalaureate Teacher Education coursework concurrently.*

Please see a counselor for more information.

**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.

**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 (see STEP below) and grade point average (GPA) for this program are very specific. Some courses require a specific grade (see below). Please see a Center for Careers in Teaching (CCT) Advisor for additional information, (714) 278-7130

- Speech 100, 120, 130 (preferred), 132 or 150
- English 100
- English 101, 103, Philosophy 106, Philosophy 103, 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
- English 230A, 230B, 246A, 246B, 248A or 248B
- History 245
- History 102
- English 106
- Political Science 101

- Geography 105
- Child Development 110 or Psychology 251
- Education/Elementary School Teachers 100 & 200
- English 222
- History 120

+ Courses are restricted to official Teacher TRAC studies only.
+++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.

**California State University – Los Angeles**

- Speech 130
- English 100
- English 103
- Philosophy 103 or 106 or Speech 235
- Chemistry 105 or 100
- Earth Science 110 or Geology 101
- Physical Science 112 or Physics 100
- Biology 120
- Math 105
- Math 110A
- Math 110B
- English 102 or 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 Web site, 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 103, 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, 103, or Speech 235
- Earth Science 110 or Geology 101
- Physical Science 112
- Math 110A and 110B
- Music 105
- Theatre 101 or PE 191
- Philosophy 100, 102 or 200
- English 222 or Speech 145
- 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

**California State University – 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 103, or Psychology 103
- Biology 120
- Geography 101 and Geog 101L
- Dance 105
- Math 150
- Art 110, 130A, or 136
- Music 101
- Theatre 101 or 110
- English 106
- English 230A
- English 248A
- History 102
- Political Science 101
- Anthropology 100, 203
- History 245
- History 246
- Sociology 101
- Physical Education 180
- Health Education 100
- Women's Studies 101 or 205
- Physics: Complete one UC transferable course in physics (minimum 3 semester or 4 quarters units)
- Chemistry: Complete one UC transferable course in chemistry (minimum 3 semester or 4 quarter units)

+ UC credit limitation. See counselor for details
For additional information, please check the ASSIST website at www.assist.org.

**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 ONE:**

<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 TWO:**

<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>

**PLUS SIX (6) UNITS FROM AT LEAST TWO OF THE FOLLOWING:**

<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

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills

<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 110</td>
<td>Fundamentals of Acting</td>
<td>3.5</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>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>

Note: The Theatre Arts program strongly suggests taking between six to eight courses of college preparatory English as well as speech, diction, singing, dance, fencing, 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>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>
<tr>
<td>TH 212</td>
<td>Scene Study</td>
<td>3.5</td>
</tr>
</tbody>
</table>

TH 101, TH 111, TH 114 and TH 115, and TH 212 must be completed with grades of “B” or better.

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 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>
<tr>
<td>SPCH 140</td>
<td>Oral Interpretation of Literature</td>
<td>3</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 other Bachelor of Fine Arts requirements.

California State University – Los Angeles

<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 145</td>
<td>Costume Production for Dance</td>
<td>1</td>
</tr>
<tr>
<td>DANC 108A</td>
<td>Dance, Modern, Beginning</td>
<td>2</td>
</tr>
<tr>
<td>DANC 130</td>
<td>Choreography</td>
<td>2</td>
</tr>
<tr>
<td>DANC 135</td>
<td>Dance Workshop</td>
<td>2</td>
</tr>
<tr>
<td>DANC 106A</td>
<td>Beginning Ballet</td>
<td>2</td>
</tr>
</tbody>
</table>

Theatre Arts option (in addition to above requirements):

<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 120</td>
<td>Theatre Stage Craft</td>
<td>3</td>
</tr>
<tr>
<td>TH 212</td>
<td>Scene Study</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Note: 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>TH 110</td>
<td>Fundamentals of Acting</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 115</td>
<td>Stage Movement and Combat</td>
<td>3</td>
</tr>
<tr>
<td>TH 120</td>
<td>Theatre Stage Craft</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 222</td>
<td>Stage Lighting</td>
<td>3</td>
</tr>
</tbody>
</table>

Theatre Options: Performance; Technical Theatre

Note: At the beginning of the semester, all incoming students are required to audition or interview 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 111</td>
<td>Intermediate Acting to Characterization</td>
<td>3.5</td>
</tr>
<tr>
<td>TH 120</td>
<td>Theatre Stage Craft</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 Scenic Design</td>
<td>2</td>
</tr>
</tbody>
</table>

University of California – Los Angeles

These courses are not formally articulated but provide recommended preparation for the program:

<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 115</td>
<td>Stage Movement and Combat</td>
<td>3</td>
</tr>
<tr>
<td>TH 133</td>
<td>Stage Crew Activity</td>
<td>1</td>
</tr>
<tr>
<td>TH 212</td>
<td>Scene Study</td>
<td>3.5</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>

Fall Admissions Only. Admission requirements include required supplemental materials such as a questionnaire, personal essay, resume and an audition/interview. For more information see www.tft.ucla.edu. 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.

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, WELD 55, WELD 60, WELD 100

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.
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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 39</td>
<td>2</td>
</tr>
<tr>
<td>WELD 50</td>
<td>3</td>
</tr>
<tr>
<td>WELD 120</td>
<td>4</td>
</tr>
<tr>
<td>or WELD 53</td>
<td>2</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 200</td>
<td>4</td>
</tr>
<tr>
<td>WELD 210L</td>
<td>2</td>
</tr>
<tr>
<td>WELD 220</td>
<td>2</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 130</td>
<td>4</td>
</tr>
<tr>
<td>WELD 240</td>
<td>4</td>
</tr>
<tr>
<td>WELD 250L</td>
<td>4</td>
</tr>
</tbody>
</table>

PIPE WELDING OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 52</td>
<td>4</td>
</tr>
<tr>
<td>WELD 54L</td>
<td>4</td>
</tr>
<tr>
<td>WELD 200</td>
<td>2</td>
</tr>
<tr>
<td>WELD 210L</td>
<td>2</td>
</tr>
</tbody>
</table>

NOTE: The student must also pass the ASME section IX6G performance exam available through the Welding Department.

WILDLIFE MANAGEMENT AND CONSERVATION TRANSFER PROGRAM

LOWER DIVISION MAJOR PREPARATION FOR HUMBOLDT 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>or CHEM 110</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>5</td>
</tr>
<tr>
<td>or PHYS 101</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

ASSOCIATE IN ARTS DEGREE

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 101</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two courses from this section (6 units):

Global Emphasis:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 205</td>
<td>3</td>
</tr>
<tr>
<td>ART 109/HUM 109</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: The student must also pass the ASME section IX6G performance exam available through the Welding Department.
ENGL 236 Studies in Women’s Literature (Women’s Studies) 3
PHIL 103 Critical Thinking and Argumentative Writing (Women’s Studies) 3
WS 106 Women in the Global Economy (Women’s Studies) 3
WMT 155 Architectural Millwork 4
WMT 181 Introduction to Computer Operations for Cabinetmaking and Design 3
WMT 201 Woodworking with Hand Tools 4

TOTAL CERTIFICATE UNITS 38

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.


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 COURSES

WMT 107 Wood Finishing 3
WMT 151 Introduction to FaceFrame Cabinetmaking 4
WMT 153 32mm System of Cabinetmaking 4
WMT 155 Architectural Millwork 4
WMT 181 Introduction to Computer Operations for Cabinetmaking and Design 3
WMT 201 Woodworking with Hand Tools 4
WMT 250 Intermediate FaceFrame Cabinetmaking 4
WMT 252 Intermediate 32mm System Cabinetmaking 4
WMT 258 Mantels and Wall Systems 4
WMT 268 A,B, or C Production Cabinetmaking 5

TOTAL CERTIFICATE UNITS 37

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 AA degree general education requirements for a total of at least 60 units.
WOODWORKING MANUFACTURING TECHNOLOGIES  FURNITURE MAKING  CERTIFICATE OF ACHIEVEMENT

WMT BASIC CORE COURSE  UNITS
WMT 101  Introduction to Woodworking  3
WMT 102  Introduction to Solid Wood Casegoods  4
WMT 103  Introduction to Tables  4
WMT 107  Wood Finishing  3
WMT 130  Furniture Design  3
WMT 132  Chair Design & Construction  4
WMT 201  Woodworking with Hand Tools  4

AND NINE (9) UNITS SELECTED FROM THE FOLLOWING COURSES:
WMT 115  Scrollsaw Fretwork and Intarsia  2
WMT 118  Wood Turning  2
WMT 137  Outdoor Furniture  2.5
WMT 202  Advanced Furniture Casegoods  4
WMT 203  Wood Veneering  3
WMT 204  Advanced Furniture Casegoods  4
WMT 211  The Workbench Class  4
WMT 233  Morris Chair  4
WMT 241  Special Topics in Handtools  2
WMT 244  Chest of Drawers  4
WMT 246  Rocking Chair  4
WMT 248  Production Furniture Making and Manufacturing  4
WMT 258  Mantels and Wall Systems  4

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.

ZOLOGY TRANSFER PROGRAM

COMMON LOWER DIVISION MAJOR PREPARATION FOR CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA  UNITS
BIOL 200  Principles of Biology  5
BIOL 201  Principles of Biology  5
CHEM 111  General Chemistry  5
CHEM 112  General Chemistry  5
PHYS 101  General Physics  4
PHYS 102  General Physics  4

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS
California State University – Long Beach
(Option within the Biology major)
MICR 200  Principles and Applications of Microbiology  5
or GEOL 101  The Earth Environment  (4)
or ESCI 110  Introduction to Earth Science  (4)
MATH 170  Analytic Geometry and Calculus I  4
or MATH 116  Calculus for Managerial, Biological and Social Science  (4)
MATH 190  Analytic Geometry and Calculus II  4

The Zoology major at CSULB includes additional lower division courses not articulated with Cerritos College.

California State Polytechnic University – Pomona
CHEM 211  Organic Chemistry  5
CHEM 212  Organic Chemistry  5
ENGL 102  Freshman Composition and Literature  3
or ENGL 103  Critical and Argumentative Writing  (3)
HED 100  Contemporary Health Problems  3
or PSYC 101  General Introductory Psychology  (3)
or PSYC 150  Personal and Social Adjustment  (3)
or PSYC 241  Introduction to Psychobiology  (3)
MATH 112  Elementary Statistics  4
MATH 116  Calculus for Managerial, Biological and Social Science  4

The Zoology major at Cal Poly Pomona includes additional lower division courses not articulated with Cerritos College.

University of California – Santa Barbara
MATH 170  Analytic Geometry and Calculus I  4
and MATH 190  Analytic Geometry and Calculus II  4
MATH 112  Elementary Statistics  4
or MATH 240  Calculus and Differential Equations  (4)

Instead of taking MATH 170 and MATH 190, students planning to transfer to UCSB and major in Zoology may take MATH 116 however, they may take MATH 34B at UCSB after transfer.

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 AA Degree in accordance with California Administrative Code, Title V, Section 55805.5.

Courses that do not meet the AA 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 Finance
Business Insurance
Business Law
Business Paralegal
Business Real Estate
Court Reporting and Captioning Careers
International Studies

COUNSELING & GUIDANCE DIVISION
(562) 860-2451 EXT. 2126
Counseling & Guidance

FINE ARTS & COMMUNICATIONS DIVISION
(562) 860-2451 EXT. 2600
Art and Design
Humanities
Mass Communications
Music
Photography
Radio/TV
Theatre Arts

HEALTH OCCUPATIONS DIVISION
(562) 860-2451 EXT. 2550
Child Development
Child Development/Early Childhood
Child Development/Family Child Care
Child Development/Infant Toddler
Child Development/Parent Education
Child Development/School Age
Child Development/Special Education
Culinary Arts
Dental Assisting
Dental Hygiene
Health Occupations
Emergency Medical Technician
Medical Front Office
Medical Assistant
Nursing
Pharmacy Clerk
Pharmacy Technician
Physical Therapist Assistant
Speech-Language Pathology Aide
Speech-Language Pathology Assistant

HPE/ATHLETICS
(562) 860-2451 EXT. 2862
Health Education
Physical Education/Athletics

HUMANITIES AND SOCIAL SCIENCES DIVISION
(562) 860-2451 EXT. 2752
Administration of Justice
Anthropology
Economics
Education/Elementary School Teaching
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

TECHNOLOGY DIVISION
(562) 860-2451 EXT. 2900
Architecture
Automotive Collision Repair
Automotive Mechanical Repair
Cosmetology
Electronics
Engineering Design Technology
Machine Tool Technology
Manufacturing Technology
Metallurgy & Material Science
Plastics Manufacturing
Technical Mathematics
Welding
Woodworking Manufacturing Technologies

INNOVATION AND ACADEMIC SUPPORT
(562) 860-2451 EXT. 2797
Educational Technology
Announcement of Courses

BUSINESS ACCOUNTING

ACCOUNTING

(Business Division)

ACCT 1T (Not Degree Applicable)
ACCOUNTING MICROCOMPUTER TUTORIAL 0.5 UNIT
Class hours: 2.0 Laboratory
Corequisite: Enrollment in one or more Accounting or Finance course.
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. (Formerly BUSA 1T)

ACCT 2T (Not Degree Applicable)
ACCOUNTING TUTORIAL 0.5 UNIT
Class hours: 2.0 Laboratory
Corequisite: ACCT 100, ACCT 101, or ACCT 102.
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. (Formerly BUSA 2T)

ACCT 51
VOLUNTEER INCOME TAX ACCOUNTING 1.5 UNITS
Class hours: 1.0 Lecture/1.5 Laboratory
Prerequisite: ACCT 61 or ACCT 250 or equivalent with a grade of Pass or "C" or higher.
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 apply skills learned in tax preparation while providing a much-needed service to their community. (Formerly BUSA 51)

ACCT 60
QUICKBOOKS ACCOUNTING 2.0 UNITS
Class hours: 1.5 Lecture/2.0 Laboratory
Corequisite: ACCT 1T
This course introduces QuickBooks 6.0, a complete accounting software system for small businesses. (Formerly BUSA 60)

ACCT 61
TURBO TAX ACCOUNTING 2.0 UNITS
Class hours: 1.5 Lecture/2.0 Laboratory
Corequisite: ACCT 1T
This course introduces personal income tax preparation using Turbo Tax for Windows, a software package for preparing individual income tax returns. (Formerly BUSA 61)

ACCT 100
INTRODUCTION TO ACCOUNTING 3.0 UNITS
Class hours: 3.0 Lecture
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. (Formerly BUSA 100)
Transfer Credit: CSU

ACCT 101
(CAN BUS 2) (CAN BUS SEQ A) FUNDAMENTALS OF ACCOUNTING I 4.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: ACCT 100 or equivalent with a grade of Pass 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. (Formerly BUSA 101)
Transfer Credit: CSU; UC

ACCT 102
(CAN BUS 4) (CAN BUS SEQ A) FUNDAMENTALS OF ACCOUNTING II 4.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: ACCT 101 or equivalent with a grade of Pass 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. (Formerly BUSA 102)
Transfer Credit: CSU; UC

ACCT 130
PAYROLL TAX ACCOUNTING 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ACCT 100 or ACCT 101 or equivalent with a grade of Pass 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. (Formerly BUSA 130)
Transfer Credit: CSU

ACCT 131
COMPUTERIZED ACCOUNTING - IBM 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: ACCT 100 or ACCT 101 or equivalent with a grade of Pass or "C" or higher.
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. (Formerly BUSA 131)
Transfer Credit: CSU

ACCT 133
SPREADSHEET ACCOUNTING I 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: ACCT 100 or equivalent with a grade of Pass or "C" or higher.
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. (Formerly BUSA 133)
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ACCT 134
SPREADSHEET ACCOUNTING II 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Prerequisite: ACCT 101 and ACCT 133 or equivalent with grades of Pass or “C” or higher.
Corequisite: ACCT 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. (Formerly BUSA 134)
Transfer Credit: CSU

ACCT 171
ACCOUNTING
WORK EXPERIENCE 1.0 UNIT
Class hours: 1 hour
Corequisite: Enrollment in 7 or more units, including Accounting Occupational Work Experience, in a declared business major.
One unit of 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. (Formerly BUSA 171)
Transfer Credit: CSU

ACCT 173
ACCOUNTING
WORK EXPERIENCE 3.0 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 of credit or 60 hours of non-paid work equals one semester 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. (Formerly BUSA 174)
Transfer Credit: CSU

ACCT 201
INTERMEDIATE
ACCOUNTING I 4.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: ACCT 102 or equivalent with a grade of Pass 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. (Formerly BUSA 201)
Transfer Credit: CSU

ACCT 202
INTERMEDIATE
ACCOUNTING II 4.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: ACCT 201 or equivalent with a grade of Pass or “C” or higher.
This course is a continuation of ACCT 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 F.A.S.B.’s (Financial Accounting Standard Board pronouncements). (Formerly BUSA 202)
Transfer Credit: CSU

ACCT 230
ADVANCED
PAYROLL ACCOUNTING 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ACCT 130 or equivalent with a grade of Pass or "C" or higher.
Corequisite: ACCT 1T.
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. (Formerly BUSA 230)
Transfer Credit: CSU

ACCT 231
CURRENT TOPICS IN PAYROLL ACCOUNTING 1.5 UNITS
Class hours: 1.5 Lecture
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 Development Department, The California Society of Certified Public Accountants, and Certified Payroll Professionals. This course may be taken for a maximum of 2 times. (Formerly BUSA 231)
Transfer Credit: CSU

ACCT 240
COST ACCOUNTING 4.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: ACCT 100 or ACCT 101 or equivalent with a grade of Pass 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 analysis by management are included. A practice set is used. (Formerly BUSA 240)
Transfer Credit: CSU

ACCT 241
MANAGERIAL ACCOUNTING 4.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: ACCT 101 and ACCT 102 or equivalent with grades of Pass 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. (Formerly BUSA 241)
Transfer Credit: CSU

ACCT 250
INCOME TAX ACCOUNTING 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ACCT 100 or ACCT 101 or equivalent with a grade of Pass or "C" or higher.
This 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. (Formerly BUSA 250)
Transfer Credit: CSU

ACCT 251
ADVANCED INCOME TAX ACCOUNTING 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ACCT 250 or equivalent with a grade Pass or "C" or higher.
This will be a continuation of ACCT 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. (Formerly BUSA 251)
Transfer Credit: CSU

ACCT 270
FUNDAMENTALS OF AUDITING 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ACCT 202 or equivalent with a grade of Pass 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. (Formerly BUSA 270)
Transfer Credit: CSU

ACCT 280
ADVANCED ACCOUNTING 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ACCT 202 or equivalent with a grade of Pass or "C" or higher.
This course covers partnership and joint venture accounting, installment sales, consolidated financial statements, bankruptcy, accounting for trusts and estates, and government and non-profit accounting. (Formerly BUSA 280)
Transfer Credit: CSU

ACCT 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

ACCT 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

ADMINISTRATION OF JUSTICE
(Humanities, Social Science Division)

AJ 71
FIRST AID-ADMINISTRATION
OF JUSTICE  2.0 UNITS
Class hours: 2.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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 107
INTRODUCTION TO PROBATION AND PAROLE  3.0 UNITS
Class hours: 3.0 Lecture
This is an introductory course that explains the principles of parole and probation as a governmental function at the federal, state, and local criminal justice systems. This course is designed to show the relationship between the police and the courts, and the effects of sentencing with regards to parole, probation, and incarceration in local and state facilities. The course will explore the overlap within the system between arrest and disposition and the areas of cooperation between service providers and the public.

Transfer Credit: CSU

AJ 110
PATROL PROCEDURES AND ENFORCEMENT TACTICS  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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AJ 150
INTRODUCTION TO CORRECTION 3.0 UNITS
Class hours: 3.0 Lecture
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 probations. An overview of special problems and clientele, custody practices and procedures, and treatment technique will be stressed.
Transfer Credit: CSU

AJ 173
ADMINISTRATION OF JUSTICE OCCUPATIONAL WORK EXPERIENCE 3.0 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. Students 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 2.0 UNITS
Class hours: 2.0 Lecture
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.
Transfer Credit: CSU

AJ 202
SUBSTANTIVE LAW 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: AJ 102 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 related 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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
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
CRIMINAL INVESTIGATION 3.0 UNITS
Class hours: 3.0 Lecture
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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

AJ 221
NARCOTICS AND VICE CONTROL
3.0 UNITS
Class hours: 3.0 Lecture
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
3.0 UNITS
Class hours: 3.0 Lecture
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

AJ 298
DIRECTED STUDIES
1.0 UNIT
Class hours: 3.0 Independent Study
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

AJ 299
DIRECTED STUDIES
2.0 UNITS
Class hours: 6.0 Independent Study
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

A&P 120
INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY
4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This course is designed as a survey of human anatomy and physiology. It covers the basic principles of human anatomy and physiology including a survey of the tissues, organ systems, and principal anatomical features. Emphasis is also placed on integrated organ system physiology, human genetics and development. (This course is designed primarily for non-biology majors.)
Transfer Credit: CSU; UC*

A&P 130
HUMAN ANATOMY AND PHYSIOLOGY
5.0 UNITS
Class hours: 4.0 Lecture/3.0 Laboratory
Prerequisite: Satisfactory completion of the English & Reading Placement Process or ENGL 52 & READ 54 or equivalents with a grade of Pass or "C" or higher and CHEM 100 or equivalent with a grade of Credit or "C" or higher.
This course examines the gross and microscopic structures of the human body using a systematic approach. Emphasis is placed on the normal function and integration of the organ systems. Homeostatic imbalances of many systems are examined. The laboratory utilizes models, human cadaver, skeletal materials, dissection and selected physiological exercises. This course is designed for students entering the nursing program at Cerritos College; however, it also meets the needs of other allied health programs. This course is strongly recommended for students who plan on taking A&P 200 and A&P 201.
Transfer Credit: CSU; UC*

A&P 150
INTRODUCTION TO HUMAN ANATOMY
4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher.
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 151
INTRODUCTION TO HUMAN PHYSIOLOGY
4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: Satisfactory completion of A&P 150 or equivalent with a grade of Pass or "C" or higher
Recommendation: CHEM 100 or equivalent with a grade of Pass or "C" or higher.
This course studies the normal functioning and integration of the organ systems in the human body. Homeostatic imbalances of many systems and examined. The course is designed for pre-nursing students; however, it also meets the needs of the allied health programs and physical education program.
Transfer Credit: CSU; UC*

A&P 200
(CAN BIOL 10) (CAN BIOL SEQ B)
HUMAN ANATOMY
5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Recommendation: A&P 120 or equivalent with a grade of Pass or "C" or higher.
This course emphasizes the gross structure, microscopic anatomy, and embryology of the organ systems of the human body. Emphasis is placed on showing the complementarily of structure and function or cellular, tissue, organ, and system levels. This is one of the courses which satisfies the requirements of...
Announcement of Courses

majors in four year Nursing Programs, Physical Therapy, PE/Kinesiology, Dental Hygiene, and related fields. It is strongly recommended that students take A&P 120 prior to this course.
Transfer Credit: CSU; UC


A&P 201 (CAN BIOL 12) (CAN BIOL SEQ B)
HUMAN PHYSIOLOGY  5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Prerequisite: A&P 200 and CHEM 100 or equivalent with grades of Pass 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 Science Division)

ANTH 100  (CAN ANTH 4)
CULTURAL ANTHROPOLOGY  3.0 UNITS
Class hours: 3.0 Lecture
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  2.0 UNITS
Class hours: 2.0 Lecture
This is an introductory study of the cultures 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 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 110
INTRODUCTION TO FORENSIC ANTHROPOLOGY  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: ANTH 115 or ANTH 115L or A&P 120 with a grade of Pass or "C" or higher.
This course focuses on human osteology, the standard scientific techniques used to make determinations of age, sex, ancestry, stature, and pathology. It provides a basic overview of the analytical techniques and procedures used in the medical-legal framework.
Transfer Credit: CSU

ANTH 115
PHYSICAL ANTHROPOLOGY  3.0 UNITS
Class hours: 3.0 Lecture
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; the human's relation to the rest of the animal kingdom; and modern human diversity and variation.
Transfer Credit: CSU; UC

ANTH 115L
INTRODUCTION TO PHYSICAL ANTHROPOLOGY LAB  1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: ANTH 115 or concurrent enrollment
This course is a comparative study of both human and non-human primates, human variation, evolution, genetics, forensic anthropology, the primate fossil record, and provides a coordinate laboratory experience with ANTH 115.
Transfer Credit: CSU; UC

ANTH 120  (CAN ANTH 6)
INTRODUCTION TO ARCHAEOLOGY  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher, and satisfactory completion of the
Reading Placement Process or READ 54 with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
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 historical 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 3.0 UNITS
Class hours: 3.0 Lecture
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 AZTECS: ANCIENT CIVILIZATIONS OF THE AMERICAS 3.0 UNITS
Class hours: 3.0 Lecture
This course is a survey of ancient Indian cultures 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 descendants in contemporary society will be examined.

Transfer Credit: CSU; UC

ANTH 203
THE ANTHROPOLOGY OF MAGIC, WITCHCRAFT, AND RELIGION 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Pass 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; UC

ANTH 205
THE ANTHROPOLOGY OF SEXUALITY AND GENDER 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher, and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Pass 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 open to students who have received credit in ANTH 204. (Formerly ANTH 204)

Transfer Credit: CSU; UC

ANTH 250
INTRODUCTION TO FIELD ARCHAEOLOGY 3.0 UNITS
Class hours: 1.0 Lecture/6.0 Laboratory
Recommendation: ANTH 120 or equivalent with a grade of Pass 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 ARCHEOLOGY 3.0 UNITS
Class hours: 1.0 Lecture/6.0 Laboratory
Recommendation: ANTH 250 or equivalent with a grade of Pass 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 for a maximum of 2 times.

Transfer Credit: CSU

ANTH 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

ANTH 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

ARCHITECTURE
(Technology Division)

ARCH 43 (Not Degree Applicable)
ARCHITECTURAL DRAWING OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Architectural Drawing work experience
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.

ARCH 110
INTRODUCTION TO ARCHITECTURE AND ENVIRONMENTAL DESIGN 3.0 UNITS
Class hours: 3.0 Lecture
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, 122, 212 - combined with ART 120 and ART 121: maximum credit, 18 units.

ARCH 111
ARCHITECTURAL DRAFTING AND DESIGN I 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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 3.0 UNITS
Class hours: 3.0 Lecture
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*
*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 2D
COMPUTER AIDED DRAFTING 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
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 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ARCH 121 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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 special emphasis on graphic presentations, colors, and models are given.
Transfer Credit: CSU

ARCH 212
ARCHITECTURAL DESIGN THEORY I 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ARCH 111 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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, 122, 212 - combined with ART 120 and ART 121: maximum credit, 18 units.

ARCH 213
INTRODUCTION TO 3-D
COMPUTER AIDED DRAFTING 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ARCH 123 or ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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 WORK DRAWINGS 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ARCH 123 or ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This course provides an introduction to the production of three-dimensional building design models and working drawings using Architectural Desktop software. Students will learn the fundamentals of creating and modifying three-dimensional massing objects, creating floor plans with doors and windows, the placing of roof and stairs, generating building elevations and sections, annotating and documenting the drawing, creating a building walk-through, and creating professional quality output. Hands-on exercises will be used to reinforce the functions of Architectural Desktop. 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 3 times.
Transfer Credit: CSU

ARCH 222
ARCHITECTURAL DESIGN THEORY II 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ARCH 212 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ARCH 123 or ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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. Students who repeat this course will improve skills through further practice and remain current with latest software updates
Transfer Credit: CSU

ARCH 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

ARCH 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
A course to provide opportunity for individual research and field projects under the direction

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ART 101  
ART HISTORY I:  
PREHISTORY TO GOTHIC    3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass 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 of all of the visual arts. It is designed to be of interest and value to the art and non-art major alike.  
Transfer Credit: CSU; UC

ART 102  
ART HISTORY II:  
RENAISSANCE TO ROCOCO    3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass 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 of all of the visual arts. It is designed to be of interest and value to the art and non-art major alike.  
Transfer Credit: CSU; UC

ART 103  
ART HISTORY III:  
NEOCLASSICAL TO PRESENT    3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass 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 of all of the visual arts. It is designed to be of interest and value to the art and non-art major alike.  
Transfer Credit: CSU; UC

ART 104  
AFRICAN ART HISTORY    3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass or “C” or higher, is strongly recommended.  
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.  
Transfer Credit: CSU; UC

ART 105A  
THE ARTS OF LATIN AMERICAN  
AND THE CARIBBEAN:  
PRE-COLUMBIAN    3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass or “C” or higher.  
This course is an overview of the art of the Americas prior to European contact. It will include an examination of the cultural, socio-political, and religious influences that have shaped the art of the Americas with a specific focus on the cultures of Mesoamerica, the Caribbean, and the Andes. This course will consist of lecture, slide presentations, discussion, and analysis of representative art of the various periods and regions.  
Transfer Credit: CSU

ART 105B  
THE ARTS OF LATIN AMERICA  
AND THE CARIBBEAN:  
COLONIAL TO THE PRESENT    3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass or “C” or higher.  
This course is an overview of the arts in colonial and post-colonial Latin America and the Caribbean. It will include an examination of the cultural, socio-political, and religious influences that have shaped Latin American and Caribbean art movements with a special focus on colonial hybridity, independence and nationalist movements, globalization, and cultural reactions to modernism and post-modernism. The course will consist of lecture, slide presentations, discussion, and analysis of representative art of the various periods and locations.  
Transfer Credit: CSU

ART 106  
MEXICAN ART    3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass 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.  
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Course Description</th>
<th>Prerequisites/Recommendations</th>
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<tbody>
<tr>
<td>ART 110</td>
<td>FREEHAND DRAWING</td>
<td>3.0</td>
<td>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.</td>
<td>ENGL 52 and READ 54 or equivalent with a grade of Pass or &quot;C&quot; or higher</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>ART 111</td>
<td>INTERMEDIATE FREEHAND DRAWING</td>
<td>3.0</td>
<td>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.</td>
<td>ART 110 or equivalent with a grade of Pass or &quot;C&quot; or higher</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>ART 112</td>
<td>LIFE DRAWING</td>
<td>3.0</td>
<td>This is an introductory course in the history 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 printing, intaglio (etching, aquatint, drypoint, softground, viscosity, and photomechanical), screenprinting and photoscreenprinting, collagraphy, embossing, and monotype. The course will increase the skill and creative output of the student in areas of his/her choice.</td>
<td>ART 116 or equivalent with a grade of Pass or &quot;C&quot; or higher</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>ART 115L</td>
<td>PRINTMAKING LAB</td>
<td>1.0</td>
<td>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 photomechanical), screenprinting and photoscreenprinting, collagraphy, 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 for a maximum of 4 times.</td>
<td>Concurrent enrollment in or prior completion of ART 110</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>ART 116</td>
<td>BEGINNING PRINTMAKING</td>
<td>3.0</td>
<td>This is an introductory course in the history 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 printing, intaglio (etching, aquatint, drypoint, softground, viscosity, and photomechanical), screenprinting and photoscreenprinting, collagraphy, embossing, and monotype. The course will increase the skill and creative output of the student in areas of his/her choice.</td>
<td>ART 116 or equivalent with a grade of Pass or &quot;C&quot; or higher</td>
<td>CSU; UC</td>
</tr>
<tr>
<td>ART 117</td>
<td>INTERMEDIATE PRINTMAKING</td>
<td>3.0</td>
<td>This course is designed to further the student's investigation into the aesthetics and techniques of printmaking, intaglio (aquatint etching softground, whiteground, sugarlift), multiple color relief printmaking, and collagraphy. Related photographic and digital image-making techniques will be studied and applied further, such as photoscreenprinting, photo-etching, halftoning, posterization technique, and use of the enlarger, digital camera, flatbed scanner, and slide scanner. This course may be taken for a maximum of 2 times.</td>
<td>ART 116 or equivalent with a grade of Pass or &quot;C&quot; or higher</td>
<td>CSU; UC</td>
</tr>
</tbody>
</table>

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ART 120
TWO-DIMENSIONAL DESIGN  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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*
*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.

ART 121  (CAN ART 16)
THREE-DIMENSIONAL DESIGN  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 120 or equivalent with a grade of Pass 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*
*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.

ART 130A
FUNDAMENTALS OF PAINTING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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

ART 130B
FUNDAMENTALS OF PAINTING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 130A or equivalent with a grade of Pass of "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

ART 133A
WATERCOLOR PAINTING  3.0 UNITS
Class hours: 1.0 Lecture/5.0 Laboratory
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  3.0 UNITS
Class hours: 1.0 Lecture/5.0 Laboratory
Prerequisite: ART 133A or equivalent with a grade of Pass 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 136
PAINTING FOR ART MAJORS   3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 110 or equivalent with a grade of Pass or "C" or higher.
Recommendation: ART 120 or equivalent with a grade of Pass 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 for a maximum of 2 times.
Transfer Credit: CSU; UC

ART 144
JEWELRY/METALSMITHING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This is an introductory course covering the design and technical processes of jewelry and metalsmithing. This course also explores three-dimensional (3-D) concepts, forms, space manipulation, and issues of wearability. The implication and effects of the history and culture of jewelry and body ornamentation are learned through audio/visual lectures and museum visits. Students will be assisted with the production of their own original jewelery design projects. This course may be taken for a maximum of 2 times.
Transfer Credit: CSU

ART 145
JEWELRY
CASTING AND MOLDS  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 144 or equivalent with a grade of Pass 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/smithing, 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 course may be taken for a maximum of 2 times.
*Transfer Credit: CSU*

**ART 150**
**INTRODUCTION TO CERAMICS** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This course is designed as an introduction to the ideas, techniques, history, and traditional art of the ceramics.
*Transfer Credit: CSU; UC*

**ART 151**
**CERAMICS - BEGINNING**
**WHEELTHROWING** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 150 or equivalent with a grade of Pass or "C" or higher.
The course builds on the knowledge and skills learned in ART 150, Introduction to Ceramics. Emphasis is on the use of the potter’s wheel. This course may be taken for a maximum of 2 times.
*Transfer Credit: CSU*

**ART 152**
**CERAMICS - BEGINNING**
**HANDBUILDING** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 150 or equivalent with a grade of Pass or "C" or higher.
The course builds on techniques learned in ART 150, Introduction to Ceramics. Emphasis is on the use of complex hand-forming techniques. This course may be taken for a maximum of 2 times.
*Transfer Credit: CSU*

**ART 153**
**CERAMICS - INTERMEDIATE**
**WHEELTHROWING** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 151 or equivalent with a grade of Pass or "C" or higher.
The course builds on techniques learned in ART 151. Emphasis is on the use of the potter’s wheel. This course may be taken for a maximum of 2 times.
*Transfer Credit: CSU*

**ART 154**
**CERAMICS - INTERMEDIATE**
**HANDBUILDING** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 154 or equivalent with a grade of Pass or "C" or higher.
This course builds on techniques learned in ART 152. Emphasis is on the use of complex hand-forming techniques. Glaze technology is introduced. This course may be taken for a maximum of 2 times.
*Transfer Credit: CSU*

**ART 155**
**BEGINNING CERAMIC SCULPTURE** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 150 or equivalent with a grade of Pass or "C" or higher.
The course is designed as an introduction to the ideas, techniques, and tradition of the art of ceramic sculpture. This course may be taken for a maximum of 2 times.
*Transfer Credit: CSU; UC*

**ART 156L**
**CERAMICS LAB** 1.0 UNIT
Class hours: 3.8 Laboratory
Corequisite: One or more of the following courses: ART 150, ART 151, ART 152, ART 155, ART 252, ART 253 or ART 255.
Open entry/open exit
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. This course may be taken a maximum of 4 times.
*Transfer Credit: CSU*

**ART 160**
**LIFE SCULPTURE** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This course is 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 for a maximum of 4 times.
*Transfer Credit: CSU*

**ART 162**
**INTRODUCTION TO SCULPTURE** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 121 or equivalent with a grade of Pass or "C" or higher.
The 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** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Recommendation: ART 162 or equivalent with a grade of Pass 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 for a maximum of 2 times.
*Transfer Credit: CSU; UC*

**ART 171**
**OCCUPATIONAL WORK EXPERIENCE IN ART** 1.0 UNIT
Class hours: 1 lecture
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** 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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 for a maximum of 2 times.
*Transfer Credit: CSU*
ART 181  
CALLIGRAPHY II  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: ART 180 or equivalent with a grade of Pass 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 for a maximum of 2 times.  
Transfer Credit: CSU

ART 182A  
LETTERING AND TYPOGRAPHY  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
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  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
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  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: ART 110 or equivalent with a grade of Pass or "C" or higher.  
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 for a maximum of 2 times.  
Transfer Credit: CSU

ART 183A  
COMMERCIAL BRUSH LETTERING  1.0 UNIT  
Class hours: 0.5 Lecture/1.5 Laboratory  
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 for a maximum of 2 times.  
Transfer Credit: CSU

ART 183B  
COPPERPLATE CALLIGRAPHY  1.0 UNIT  
Class hours: 0.5 Lecture/1.5 Laboratory  
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 for a maximum of 2 times.  
Transfer Credit: CSU

ART 184  
GRAPHIC DESIGN I   3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: ART 182A or equivalent with a grade of Pass 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   3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: ART 110 or equivalent with a grade of Pass 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 WITH ADOBE ILLUSTRATOR   3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
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  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
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 for a maximum of 2 times.  
Transfer Credit: CSU

ART 189L  
COMPUTER GRAPHICS LAB  1.0 UNIT  
Class hours: 3.0 Laboratory  
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  
This course is designed to increase skills in computer graphics systems. Students will receive individual help with on-going projects assigned in corequisite graphics and multimedia classes. Work may be assigned in the following areas: presentation techniques and hands-on software tutorials. This course may be taken for a maximum of 4 times.  
Transfer Credit: CSU

ART 190  
ANIMATION PRINCIPLES  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
This class 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 course may be taken for a maximum of 2 times.  
Transfer Credit: CSU

ART 190L  
COMPUTER GRAPHICS LAB  1.0 UNIT  
Class hours: 3.0 Laboratory  
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  
This course is designed to increase skills in computer graphics systems. Students will receive individual help with on-going projects assigned in corequisite graphics and multimedia classes. Work may be assigned in the following areas: presentation techniques and hands-on software tutorials. This course may be taken for a maximum of 4 times.  
Transfer Credit: CSU

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ART 191A
3D COMPUTER ANIMATION 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This course will serve 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 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 191A or equivalent with a grade of Pass or “C” or higher.
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 for a maximum of 2 times.
Transfer Credit: CSU

ART 192
PHOTOSHOP/DIGITAL IMAGING 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This course will serve as an introduction to motion picture editing by taking students through the history of editing and analyzing specific techniques through class examples of significant films. Students will explore the work of important directors and editors and chart their contributions to the art of cinematic editing. 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 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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 for a maximum of 2 times.
Transfer Credit: CSU

ART 194A
ADVANCED FINAL CUT PRO 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This is the first course in the animation major sequence. It serves as an introduction to 3D computer animation, which adopts basic techniques developed in traditional model making and sculpture and applies those procedures to a virtual 3D environment. Emphasis will be placed on fundamental principles beginning with "Primitives" through intermediate approaches using "SubPatches." Other essential topics included are composition, surfacing, lighting, and rendering techniques. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 196
WEB DESIGN WITH FLASH AND DREAMWEAVER 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Recommendation: CIS 205 or equivalent with a grade of Pass 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 course may be taken for a maximum of 2 times.
Transfer Credit: CSU

ART 197
DIGITAL PAINTING 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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 needs of students making the transition from traditional to digital media. This course may be taken for a maximum of 2 times.
Transfer Credit: CSU

ART 198
MOTION GRAPHICS 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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 for a maximum of 2 times.
Transfer Credit: CSU

ART 213
INTERMEDIATE LIFE DRAWING 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 112 or equivalent with a grade of Pass or “C” or higher.
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 for 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.
ART 214
SPECIAL STUDIES IN LIFE DRAWING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 213 or equivalent with a grade of Pass 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 taken for a maximum of 2 times.
 Transfer Credit: CSU; UC

ART 217L
ADVANCED SCREENPRINTING/ADVANCED ETCHING LAB 1.0 UNIT
Class hours: 3.0 Laboratory
Corequisite: Concurrent enrollment in or prior completion of ART 218 or ART 219 or equivalent with a grade of Pass or "C" or higher.
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 photoscreenprinting, 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 for a maximum of 4 times.
 Transfer Credit: CSU

ART 218
SCREENPRINTING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 117 or equivalent with a grade of Pass of "C" or higher.
This course 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 for a maximum of 2 times.
 Transfer Credit: CSU; UC

ART 219
ADVANCED ETCHING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 117 or equivalent with a grade of Pass of "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 etchings, 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 for a maximum of 2 times.
 Transfer Credit: CSU; UC

ART 221
INTERMEDIATE PAINTING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 130B or equivalent with a grade of Pass of "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 for a maximum of 2 times.
 Transfer Credit: CSU; UC

ART 231
INTERMEDIATE PAINTING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 130B or equivalent with a grade of Pass of "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 for a maximum of 2 times.
 Transfer Credit: CSU; UC

ART 232
PORTRAITURE: DRAWING/PAINTING THE HEAD  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 112 or equivalent with a grade of Pass of "C" or higher.
This course is an introduction to portraiture: its techniques, history, and social uses. Many genres of portraiture will be surveyed to analyze how they give expression to cultural and societal values. Formal portraiture, character stereotypes, images from popular culture, African and Asian masks, the face of the nude, expressionistic psychological portraiture, commercial portrait styles, and the self-portrait, all will be discussed and explored. Live models will pose. This course may be taken for a maximum of 2 times.
 Transfer Credit: CSU; UC

ART 237
LIFE PAINTING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 112 or equivalent with a grade of Pass 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 for a maximum of 2 times.
 Transfer Credit: CSU; UC

ART 238
SPECIAL STUDIES IN PAINTING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 136 or ART 237 or equivalent with a grade of Pass or "C" or higher.
This is an advanced course designed for individualized study by 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 for a maximum of 2 times.
 Transfer Credit: CSU, UC credit determined after admission

ART 239
PORTRAIT PAINTING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 130A or ART 232 or ART 237 or equivalent with a grade of Pass or "C" or higher.
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 for a maximum of 2 times.
 Transfer Credit: CSU; UC

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ART 246
JEWELRY DESIGN FABRICATION 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 145 or equivalent with a grade of Pass 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 course may be taken for a maximum of 2 times.
Transfer Credit: CSU

ART 252
CERAMICS - FORM AND TECHNIQUE 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 151 or ART 152 or equivalent with a grade of Pass or "C" or higher.
This course is 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 for a maximum of 2 times.
Transfer Credit: CSU; UC

ART 253
CERAMICS - FORM AND CONTENT 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 252 or equivalent with a grade of Pass or "C" or higher.

ART 255
INTERMEDIATE CERAMIC SCULPTURE 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 155 or equivalent with a grade of Pass 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 for a maximum of 2 times.
Transfer Credit: CSU; UC

ART 264
SCULPTURE-STONECARVING 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 163 or equivalent with a grade of Pass 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 stone-carving techniques. This course may be taken for a maximum of 3 times.
Transfer Credit: CSU; UC

ART 284
GRAPHIC DESIGN II 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 184 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 185 or equivalent with a grade of Pass 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 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: ART 181 or equivalent with a grade of Pass 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 develop the ability to modify historical styles of letterforms for contemporary applications in aesthetic and communicative areas. Expertise and knowledge will be expanded through the exploration of tools, materials, and techniques. This course may be taken for a maximum of 2 times.
Transfer Credit: CSU

ART 287B
ROMAN CALLIGRAPHY 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: ART 287A or equivalent with a grade of Pass 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 shaping of historical letterforms. Students will develop the ability to modify historical styles of letterforms for contemporary applications in aesthetic and communicative areas. Expertise and knowledge will be expanded through the exploration of tools, materials, and techniques. This course may be taken for a maximum of 3 times.
Transfer Credit: CSU
**Announcement of Courses**

**ART 299**
**DIRECTED STUDIES 2.0 UNITS**
Class hours: 6.0 Independent Study
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

**ASTRONOMY (Science, Engineering, Mathematics Division)**

**ASTR 101**
**ELEMENTARY ASTRONOMY 3.0 UNITS**
Class hours: 3.0 Lecture
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 3.0 UNITS**
Class hours: 3.0 Lecture
This course is a non-technical introduction to astronomy, with emphasis on stars, galaxies, and the origin and evolution of the universe. Topics include the nature of light, the atom, and telescopes; the birth, evolution, and death of stars; the Milky Way Galaxy; normal, active, and cannibal galaxies; and the Big Bang model. 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 3.0 UNITS**
Class hours: 3.0 Lecture
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 104**
**LIFE IN THE UNIVERSE 3.0 UNITS**
Class hours: 3.0 Lecture
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 1.0 UNIT**
Class hours: 3.0 Laboratory
Prerequisite: ASTR 101, ASTR 102, ASTR 103, ASTR 104 or ASTR 106 or equivalent with a grade of Pass or "C" or higher, or concurrent enrollment.

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 3.0 UNITS**
Class hours: 3.0 Lecture
This course explores humanity's changing view of the cosmos and its place in that cosmos from the earliest times to the present. Topics include comparative cosmologies of ancient culture, the Copernican revolution, the Enlightenment, and the modern view of the universe developed over the last two centuries. Course work includes readings about figures and projects using models of historic instruments.

Transfer Credit: CSU; UC

**ASTR 298**
**DIRECTED STUDIES 1.0 UNIT**
Class hours: 3.0 Independent Study
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

**AUTOMOTIVE COLLISION REPAIR & REFINISHING/AUTOBODY**
(Science, Engineering, Mathematics Division)

**AB 51**
**NON-STRUCTURAL REPAIR 4.5 UNITS**
Class hours: 3.0 Lecture/5.0 Laboratory
This course covers basic aspects of the
Announcement of Courses

AB 52
STRUCTURAL DAMAGE REPAIR  4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Corequisite: AB 51 or equivalent with a grade of Pass or "C" or higher or prior completion.
This course is part of an instructional package for the student who wishes additional knowledge in automotive collision repair. It introduces the student to unitized and space-frame construction, high-strength steel components, chassis design, sheet metal straightening techniques, alignment, and installation of body parts. Also included is safety related to electrical problems, introduction of plastic components and continued welding and metallurgical experience. This course may be taken a maximum of 2 times.

AB 53
SUSPENSION, ALIGNMENT AND POWER TRAIN DAMAGE  4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Corequisite: AB 51 or equivalent with a grade of Pass or "C" or higher or prior completion.
This course introduces students to suspension control point alignment, suspension systems, and power train problems related to automotive collisions. Related topics include frame-straightening systems, measurement 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: 3.0 Lecture/5.0 Laboratory
Corequisite: AB 51 or equivalent with a grade of Pass 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 of 2 times.

AB 55
STRUCTURAL PANEL REPLACEMENT  4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Corequisite: AB 51 or equivalent with a grade of Pass or "C" or higher or prior completion.
This course emphasizes frame and structural repair. Instruction includes repair and replacement of structural body panels, removal 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  2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
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  2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
Prerequisite: AB 56 or equivalent with a grade of Pass 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.

AB 58
COLLISION REPAIR UPDATE  4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Prerequisite: AB 51, AB 52, and AB 53 or equivalent courses with grades of Pass 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.

Transfer Credit: CSU

AB 59A
COMPUTERIZED MEASURING TRAINING  1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Corequisite: AB 51 or equivalent with a grade of Pass or "C" or higher or prior completion.
Recommendation: 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
UNITIZED BODY ANALYSIS AND REPAIR PLANNING  1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: AB 51 or AB 59A or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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  1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: AB 51, AB 59A, or AB 59B or equivalent with grades of Pass or "C" or higher, or appropriate work experience.

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Recommendation: Current or previous employment in collision repair facility. This course expands student learning of damage analysis and repair planning to include full-frame vehicles (pickups and sport utility vehicles). Additional case studies of damaged full-frame vehicles will be presented that give technicians the information needed to measure, analyze, and develop appropriate repair plans. The additional information in this course is fundamental for success in more advanced damage analysis and repair courses. This course may be taken a maximum of 2 times.

AB 59E
FULL FRAME REPAIR-GAUGES 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: AB 51 or AB 59B or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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 hook-up and repair options, and methods of determining repair completion with universal measuring gauges. This course may be taken a maximum of 2 times.

AB 61
PREPARATION AND SPOT REFINISHING 4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Corequisite: AB 51 or equivalent with a grade of Pass 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: 3.0 Lecture/5.0 Laboratory
Corequisite: AB 51 or equivalent with a grade of Pass or "C" or higher or prior completion.
This course develops the skills of the professional automotive refinisher in overall 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: 3.0 Lecture/5.0 Laboratory
Corequisite: AB 51 or equivalent with a grade of Pass or "C" or higher or prior completion.
In this course, students learn to prepare and refinish 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, color, 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
MIX AND ADJUSTING COLOR 2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
This course increases the marketable skills for the automotive refinisher in the trade. Emphasis is on color and texture duplication, the use of automotive toners to scratch paint mix and to mix specific colors using formulas and tintometers. It also includes spray-blending techniques, compatibility, troubleshooting of materials, and paint chemistry. This course may be taken a maximum of 3 times.

AB 66
LETTERING, STRIPING AND DESIGN 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
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-striping, and air-brushing. This course may be taken a maximum of 2 times.

AB 68
REFINISHING UPDATE 4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Prerequisite: AB 61, AB 62, and AB 63 or equivalent with grades of Pass 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
AUTOMOTIVE COLLISION REPAIR OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: 1.0 Work Experience
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.

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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: 3.0 Lecture/5.0 Laboratory  
Prerequisite: AB 51 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
This course emphasizes design and fabrication of automotive body panels. Additional topics include customization of existing body panels, partial-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: 3.0 Lecture/5.0 Laboratory  
Recommendation: AB 75 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
This course furthers 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: 3.0 Lecture/5.0 Laboratory  
Prerequisite: AB 51 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
Recommendation: AB 75 or equivalent with a grade of Pass 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: 3.0 Lecture/5.0 Laboratory  
Recommendation: AB 51 or equivalent with a grade of Pass 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**  
2.0 UNITS  
Class hours: 2.0 Lecture  
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 for a maximum of 4 times.

**AB 83A**  
**COMPUTERIZED DAMAGE ESTIMATING-ADP**  
1.5 UNITS  
Class hours: 1.5 Lecture/0.5 Laboratory  
Recommendation: Proficient in MS Windows Software application.  
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 83M**  
**COMPUTERIZED DAMAGE ESTIMATING-MITCHELL**  
1.5 UNITS  
Class hours: 1.5 Lecture/0.5 Laboratory  
Recommendation: Proficient in MS Windows Software application.  
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**  
2.0 UNITS  
Class hours: 2.0 Lecture  
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 maximum of 4 times.

**AB 88**  
**ESTIMATING AND MANAGEMENT UPDATE**  
3.0 UNITS  
Class hours: 2.5 Lecture/1.4 Laboratory  
Prerequisite: Nine units of collision repair estimating and/or management or equivalent with grades of Pass or "C" or higher, or appropriate work experience.  
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 98**
**DIRECTED STUDIES** 1.0 UNIT
Class hours: 3.0 Independent Study
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.

**AB 99**
**DIRECTED STUDIES** 2.0 UNITS
Class hours: 6.0 Independent Study
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.

**AB 181**
**NON-STRUCTURAL DAMAGE ESTIMATING** 3.0 UNITS
Class hours: 3 lecture/1 lab
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 “judgment repair times” (estimated repair times for damage). Students learn to properly format handwritten 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** 3.0 UNITS
Class hours: 2.5 Lecture/1.5 Laboratory
Prerequisite: AB 181 or equivalent with a grade of Pass or “C” or higher, or appropriate work experience.
Recommendation: Proficient in MS Windows Software application.
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**

**AB 183**
**COMPUTERIZED DAMAGE ESTIMATING** 1.5 UNITS
Class hours: 1.5 Lecture/0.5 Laboratory
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 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 software program will be reviewed extensively. This course may be taken a maximum of 4 times.

**Transfer Credit: CSU**

**AB 188**
**INTRODUCTION TO AUTOMOTIVE CLAIMS HANDLING** 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: AB 181 or equivalent with a grade of Pass or “C” or higher, or appropriate work experience.
In this course, students are introduced to the automotive claims handling process. The course presents the knowledge and skills needed to begin processing automotive insurance claims. Topics include vehicle inspection process, identification of pre-existing damage, industry repair standards, and completion of claims-processing paperwork. Students will identify and recommend appropriate repair methodology for vehicle repairs maintaining required coverage limitations and complete related paperwork.

**Transfer Credit: CSU**

**AB 281**
**STRUCTURAL DAMAGE ANALYSIS FOR ESTIMATORS** 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: AB 51, AB 181 or AB 182 or equivalent with grades of Pass or “C” or higher, or appropriate work experience.
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 4 times.

**Transfer Credit: CSU**

**AB 282**
**STEERING AND SUSPENSION FOR DAMAGE ESTIMATORS** 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: AB 281 or equivalent with a grade of Pass or “C” or higher, or appropriate work experience.
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 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: AB 52, or AB 281, or AB 282 or equivalent with grades of Pass or "C" or higher, or appropriate work experience.
Recommendation: Current or previous employment in collision repair facility. 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 3.0 UNITS
Class hours: 2.5 Lecture/1.5 Laboratory
Recommendation: Proficient in MS Windows Software application.
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 2.0 UNITS
Class hours: 2.0 Lecture
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

AB 288
ADVANCED AUTOMOTIVE CLAIMS 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: AB 181 or AB 188 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
In this course, students learn effective automotive claims handling. The course presents the skills needed to effectively process automotive insurance claims with differing coverage criteria. Topics include structural and cosmetic damage analysis, total loss evaluation, theft recoveries, vandalism, claims negotiation, vehicle re-inspection process, fraud detection, identification of pre-existing damage, appropriate repair standards, personal presentation, and image projection.
Transfer Credit: CSU

AUTO 1 (Not Degree Applicable)
ENGINE MAINTENANCE 0.5 UNIT
Class hours: 0.8 Lecture/0.2 Laboratory
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 (Not Degree Applicable)
FUEL SYSTEMS 0.5 UNIT
Class hours: 0.8 Lecture/0.2 Laboratory
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 (Not Degree Applicable)
LUBRICATION AND COOLING 0.5 UNIT
Class hours: 0.8 Lecture/0.2 Laboratory
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.

AUTO 4 (Not Degree Applicable)
ELECTRICAL SYSTEMS 0.5 UNIT
Class hours: 0.8 Lecture/0.2 Laboratory
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 (Not Degree Applicable)
BRAKES AND SUSPENSION 0.5 UNIT
Class hours: 0.8 Lecture/0.2 Laboratory
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 (Not Degree Applicable)
TRANSMISSION AND DRIVE TRAIN 0.5 UNIT
Class hours: 0.8 Lecture/0.2 Laboratory
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 (Not Degree Applicable)
AIR CONDITIONING AND HEATING 0.5 UNIT
Class hours: 0.8 Lecture/0.2 Laboratory
This is a fundamental course in automotive air conditioning and heating. 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 54
INTRODUCTION TO ELECTRIC VEHICLE 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
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...
Announcement of Courses

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 maximum of 2 times.

**AUTO 55**  
**ADVANCED TECHNOLOGY**  
**ELECTRIC VEHICLE**  
**4.0 UNITS**

Class hours: 3.0 Lecture/3.0 Laboratory  
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 (Not Degree Applicable)**  
**INTRODUCTION TO INTELLIGENT TRANSPORTATION SYSTEMS (ITS) AND TELEMATICS**  
**3.0 UNITS**

Class hours: 3.0 Lecture  
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, telecommunications, traffic safety, and traffic management. The material focuses on current trends and opportunities in the field of Intelligent Transportation Systems.

**AUTO 73**  
**AUTOMOTIVE MECHANICAL REPAIR OCCUPATIONAL WORK EXPERIENCE**  
**3.0 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 74**  
**AUTOMOTIVE MECHANICAL REPAIR OCCUPATIONAL WORK EXPERIENCE**  
**4.0 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 SPECIAL**  
**5.0 UNITS**

Class hours: 4.0 Lecture/4.0 Laboratory  
Recommendation: Appropriate work experience.  
This alternative course will meet and exceed the Bureau of Automotive Repair (BAR) for Automotive Service Excellence (ASE) certifications 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.

**AUTO 89**  
**DIRECTED STUDIES**  
**1.0 UNIT**

Class hours: 3.0 Independent Study  
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.

**AUTO 99**  
**DIRECTED STUDIES**  
**2.0 UNITS**

Class hours: 6.0 Independent Study  
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.

**AUTO 100**  
**AUTOMOTIVE MAINTENANCE AND OPERATION**  
**4.0 UNITS**

Class hours: 3.0 Lecture/3.0 Laboratory  
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**  
**5.0 UNITS**

Class hours: 4.0 Lecture/4.0 Laboratory  
Recommendation: AUTO 100 or equivalent with a grade of Pass or "C" or higher.  
This is 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.

*Transfer Credit: CSU*

**AUTO 111**  
**AUTOMOTIVE ENGINES** 4.0 UNITS  
Class hours: 3.3 Lecture/3.3 Laboratory  
Prerequisite: AB 73/74  
Recommendation: AUTO 100 or equivalent with a grade of Pass 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.

*Transfer Credit: CSU*

**AUTO 120**  
**AUTOMATIC TRANSMISSIONS AND AXLES** 5.0 UNITS  
Class hours: 4.0 Lecture/4.0 Laboratory  
Prerequisite: AB 73/74  
Recommendation: AUTO 100 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
This course is focused on the principles of automatic transmissions and transaxles. Procedures for diagnosing troubles, adjusting, and overhauling the automatic transmission and transaxle are studied and applied in the shop. This course may be taken a maximum of 2 times.

*Transfer Credit: CSU*

**AUTO 121**  
**DRIVETRAIN TRANSMISSIONS AND AXLES** 6.0 UNITS  
Class hours: 5.0 Lecture/5.0 Laboratory  
Prerequisite: AB 73/74  
Recommendation: AUTO 181 or equivalent with a grade of Pass or "C" or higher.  
This course is a study of the principles of the automotive power systems-clutch, manual and automatic transmission, transaxles, transfer case, driveline, drive-axle, differential and all-wheel drive systems and service, including diagnosis and service. The course may be taken a maximum of 2 times.

*Transfer Credit: CSU*

**AUTO 130**  
**MANUAL DRIVETRAIN AND AXLES** 5.0 UNITS  
Class hours: 4.0 Lecture/4.0 Laboratory  
Recommendation: AUTO 100 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
This is a study of the principles of the automotive power systems-clutch, manual and automatic transmission, transaxles, transfer cases, drive line, drive-axle, differential and all-wheel drive systems and service, including diagnosis and service. The course may be taken a maximum of 2 times.

*Transfer Credit: CSU*

**AUTO 140**  
**AUTOMOTIVE STEERING AND SUSPENSION** 5.0 UNITS  
Class hours: 4.0 Lecture/4.0 Laboratory  
Recommendation: AUTO 100 or equivalent with a grade of Pass 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** 5.0 UNITS  
Class hours: 4.0 Lecture/4.0 Laboratory  
Recommendation: AUTO 100 or equivalent with a grade of Pass 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.

*Transfer Credit: CSU*

**AUTO 151**  
**AUTOMOTIVE ALIGNMENT** 6.0 UNITS  
Class hours: 5.0 Lecture/5.0 Laboratory  
Recommendation: AUTO 100 or equivalent with a grade of Pass or "C" or higher.  
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 this trade.

*Transfer Credit: CSU*

**AUTO 160**  
**AUTOMOTIVE ELECTRICITY** 5.0 UNITS  
Class hours: 4.0 Lecture/4.0 Laboratory  
Recommendation: AUTO 100 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
This is a theoretical/practical course in basic electricity and automotive electrical systems, such as battery, starting, charging, and electronic ignition. This course may be taken a maximum of 2 times.

*Transfer Credit: CSU*

**AUTO 161**  
**AUTOMOTIVE ELECTRICITY** 7.0 UNITS  
Class hours: 6.0 Lecture/4.0 Laboratory  
Recommendation: AUTO 100 or AUTO 151 or equivalent with a grade of Pass or "C" or higher.  
This is a theoretical/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.

*Transfer Credit: CSU*

**AUTO 170**  
**AUTOMOTIVE AIR CONDITIONING** 4.0 UNITS  
Class hours: 3.0 Lecture/3.0 Laboratory  
Recommendation: AUTO 160 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
This theory and shop course is designed to teach basic automotive air conditioning using 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 is addressed. This course may be taken a maximum of 2 times.

*Transfer Credit: CSU*

**AUTO 179**  
**AUTOMOTIVE AIR CONDITIONING** 4.0 UNITS  
Class hours: 3.3 Lecture/3.3 Laboratory  
Recommendation: AUTO 161 or equivalent with a grade of Pass or "C" or higher.  
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 unit.

*Transfer Credit: CSU*

**AUTO 180**  
**ELECTRONIC ENGINE MANAGEMENT SYSTEMS** 5.0 UNITS  
Class hours: 4.0 Lecture/4.0 Laboratory  
Recommendation: AUTO 100 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
This is a theoretical/practical course pertaining to the operation, individual components, and the overall logic by which fuel systems components work together. Feedback carburetion, fuel...
injection and electronic controls will be included along with OBD-I and OBD-II systems operation and comparisons. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

AUTO 181
ELECTRONIC ENGINE MANAGEMENT
SYSTEMS-CORPORATE  6.0 UNITS
Class hours: 5.0 Lecture/5.0 Laboratory
Corequisite: AUTO 73/74.
Recommendation: AUTO 100 or equivalent with a grade of Pass or "C" or higher.
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. The course will be presented using a single manufacturer's product line.
Transfer Credit: CSU

AUTO 182
INTRODUCTION TO ALTERNATIVE FUEL  3.0 UNITS
Class hours: 3.0 Lecture
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.
Transfer Credit: CSU

AUTO 190
AUTOMOTIVE MANAGEMENT  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: AUTO 100 or equivalent with a grade of Pass or "C" or higher.
This course is designed to furnish the student with knowledge, experience and practice in supervision and management of an automotive repair facility. Emphasis is placed on customer relations, scheduling, cost estimation, and efficient use of time and space.
Transfer Credit: CSU

AUTO 193
AUTOMOTIVE SERVICE INFORMATION MANAGEMENT  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Automotive major or employment in an automotive repair facility.
This course will cover customer satisfaction, understanding new car warranties, service contracts and operating policies. A review of California common laws and BAR regulations will be included. Emphasis is based on computerized and electronic information systems including, All Data, Mitchell on Demand, ADP Automotive Management Systems.
Transfer Credit: CSU

AUTO 194
RETAILING AUTOMOTIVE SERVICE  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Current automotive student or employed as an automotive service professional. This course deals with issues related to the automotive repair facility's management, productivity, and operation of vehicle fleets. Taking into account the facility infrastructure, the focus will be on scheduling work to effectively utilize facilities and staff to improve production and profitability. Cost effective techniques for equipment procurement, management, and maintenance will also be covered. Shop organization and workflow will be discussed including safety and regulatory issues.
Transfer Credit: CSU

AUTO 195
AUTOMOTIVE CUSTOMER RELATIONS  3.0 UNITS
Class hours: 3.0 Lecture
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  5.0 UNITS
Class hours: 4.0 Lecture/4.0 Laboratory
Recommendation: AUTO 100 or equivalent with a grade of Pass 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
Transfer Credit: CSU

AUTO 211
HIGH PERFORMANCE ENGINES  5.0 UNITS
Class hours: 4.0 Lecture/4.0 Laboratory
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.
Transfer Credit: CSU

AUTO 212
AUTOMOTIVE SPECIALTY  2.0 UNITS
Class hours: 6.0 Laboratory
Prerequisite: AUTO 210 or equivalent with grades of Pass 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.
Transfer Credit: CSU

AUTO 260
ADVANCED ELECTRICAL SYSTEMS  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: AUTO 160 or equivalent with a grade of Pass 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 power accessories in the area of diagnosing and component repairs. (Formerly AUTO 223)
Transfer Credit: CSU

AUTO 280
DIAGNOSTIC ENGINE PERFORMANCE  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Recommendation: AUTO 100 or equivalent with a grade of Pass 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.
Transfer Credit: CSU

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
AUTO 281
EMISSION CONTROL SYSTEMS - 1997 STANDARDS 5.0 UNITS
Class hours: 4.0 Lecture/4.0 Laboratory
Prerequisite: AUTO 100 or equivalent with a grade of Pass 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 for a maximum of 2 times. (Formerly AUTO 170)
Transfer Credit: CSU

BIOLOGY
(Science, Engineering, Mathematics Division)

BIOL 100
NATURAL HISTORY OF SO CALIFORNIA 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 for a maximum of 2 times.
Transfer Credit: CSU

BIOL 105
MAN AND ENVIRONMENT 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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

BIOL 110
CALIFORNIA ANIMALS AND PLANTS 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: BIOL 120 or equivalent with a grade of Pass or "C" or higher.

BIOL 115
MARINE BIOLOGY 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
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 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
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 BOT 120.

BIOL 180L
LIFE SCIENCE PREPARATIONS 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: BIOL 120 or equivalent with a grade of Pass 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 for a maximum of 2 times.
Transfer Credit: CSU

BIOL 200
PRINCIPLES OF BIOLOGY 5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Prerequisite: CHEM 111 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment. BIOL 120 or ZOOL 120 or BOT 120 or equivalent with a grade of Pass or "C" or higher.
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
PRINCIPLES OF BIOLOGY (CAN BIOL SEQ A) 5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Prerequisite: CHEM 111 or equivalent with a grade of Pass or "C" or higher. BIOL 120 or ZOOL 120 or BOT 120 or equivalent with a grade of Pass or "C" or higher.
The principles of modern biology are discussed at the molecular, cellular, and organismic levels. Integrated within the course will be units on biochemistry, cell biology, origin of life, physiology of excitable tissues, genetics, molecular biology, biotechnology, immunology and developmental biology.
Transfer Credit: CSU; UC

BIOL 202
MOLECULAR BIOLOGY/GENETICS 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: BIOL 201 and CHEM 211 or equivalent with grades of Pass or "C" or higher. CHEM 211 may be taken concurrently.
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 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: BIOL 120 or equivalent with a
grade of Pass 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 for a maximum of 4 times.

Transfer Credit: CSU; UC credit determined after admission

**BOTANY**

**(Science, Engineering, Mathematics Division)**

**BOT 120 INTRODUCTION TO PLANT SCIENCE**  **4.0 UNITS**

Class hours: 2.0 Lecture/6.0 Laboratory

Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.

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

**BOT 298 DIRECTED STUDIES**  **1.0 UNIT**

Class hours: 3.0 Independent Study

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

**BOT 299 DIRECTED STUDIES**  **2.0 UNITS**

Class hours: 6.0 Independent Study

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

**BIOL 298 DIRECTED STUDIES**  **1.0 UNIT**

Class hours: 6.0 Independent Study

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

**BIOL 299 DIRECTED STUDIES**  **2.0 UNITS**

Class hours: 6.0 Independent Study

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

**ANNOUNCEMENT OF COURSES**

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**BA 50 MATH FOR BUSINESS AND FINANCE**  **3.0 UNITS**

Class hours: 3.0 Lecture

This course is a study of basic math as it relates to specific areas of business. Topics covered include percent, interest markup, discounting, stocks, annuities, consumer credit, loans, and bank reconciliations.

Transfer Credit: CSU

**BA 51 LEGAL ASPECTS OF MANAGEMENT**  **3.0 UNITS**

Class hours: 3.0 Lecture

This course covers statutes, ordinances, rules, regulations, and orders that influence the operation 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. It is designed for management majors.

Transfer Credit: CSU

**BA 62 BUSINESS ON THE INTERNET**  **1.5 UNITS**

Class hours: 1.5 Lecture

This course explores the current status of business and marketing practices on the Internet. Through the use of computers in the classroom, the students will explore business resources on the Internet. Opportunities on the Internet are in the areas of entrepreneurial management, business applications, marketing, and sales. Resources that are utilized are Internet service providers as well as electronic mailing lists and chat groups.

Transfer Credit: CSU

**BA 63 HOW TO START A HOME-BASED BUSINESS**  **1.5 UNITS**

Class hours: 1.5 Lecture

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 65
NATIONAL MANAGEMENT ASSOCIATION: ROLE OF THE SUPERVISOR 1.0 UNIT
Class hours: 1.0 Lecture
This course examines the supervisor’s role, including income, status, and psychological rewards. It also examines the characteristics that effective supervisors have in common which are primarily centered on people skills and managerial capabilities. We will explore the context and basic knowledge factors that determine supervisory performance.

BA 66
NATIONAL MANAGEMENT ASSOCIATION: MANAGEMENT PRINCIPLES 1.0 UNIT
Class hours: 1.0 Lecture
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 67
NATIONAL MANAGEMENT ASSOCIATION: COMMUNICATION SKILLS 1.0 UNIT
Class hours: 1.0 Lecture
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 68
NATIONAL MANAGEMENT ASSOCIATION: INTERPERSONAL RELATIONSHIP SKILLS 1.0 UNIT
Class hours: 1.0 Lecture
This course will equip people with interpersonal relationship skills and concepts that will make them more effective as managers. The emphasis is on learning the fundamentals and techniques of relating to others, presenting up-to-date concepts that help managers develop themselves and become more effective in working with people.

BA 69
NATIONAL MANAGEMENT ASSOCIATION: DEVELOPING PERFORMANCE 1.0 UNIT
Class hours: 1.0 Lecture
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
NATIONAL MANAGEMENT ASSOCIATION: NEW EMPLOYEE 1.0 UNIT
Class hours: 1.0 Lecture
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
NATIONAL MANAGEMENT ASSOCIATION: COACHING/ COUNSELING 1.0 UNIT
Class hours: 1.0 Lecture
This course emphasizes the manager’s role in the development of a skill employee. This course explains how managers coach and counsel employees effectively. It also teaches the manager nonjudgmental communication and how to actively listen and provide feedback.

BA 77
NATIONAL MANAGEMENT ASSOCIATION: LEADERSHIP DEVELOPMENT 1.0 UNIT
Class hours: 1.0 Lecture
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 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
NATIONAL MANAGEMENT ASSOCIATION: BUSINESS CONCEPTS 1.0 UNIT
Class hours: 1.0 Lecture
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
NATIONAL MANAGEMENT ASSOCIATION: LAW FOR THE SUPERVISOR 1.0 UNIT
Class hours: 1.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
This is a survey course designed to acquaint the student with the legal aspects of international business law. It includes discussions regarding the responsibilities of states for the treatment of aliens and foreign businesses, multinational enterprises, foreign investments, importing and exporting, and money and banking.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
BA 104
MANAGING CULTURAL DIVERSITY 3.0 UNITS
Class hours: 3.0 Lecture
This course introduces students 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. This course can be taken in either a traditional or an online learning environment.
Transfer Credit: CSU

BA 105
PERSONNEL-POLICY AND PROCEDURES 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 indepth 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 109
SUPERVISION 3.0 UNITS
Class hours: 3.0 Lecture
This is a course focusing on the collective bargaining and the functions of management, unions and labor agreements. An indepth 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 3.0 UNITS
Class hours: 3.0 Lecture
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 111
LEGAL ENVIRONMENT OF BUSINESS 3.0 UNITS
Class hours: 3.0 Lecture
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 business organizations. This course can be taken in either a traditional or an online learning environment.
Transfer Credit: CSU; UC*
*UC credit limits may apply. LAW 110, LAW 111, and BA113 combined; maximum credit, one course.

BA 112
MARKETING 3.0 UNITS
Class hours: 3.0 Lecture
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. This course can be taken in either a traditional or an online learning environment.
Transfer Credit: CSU

BA 113
MANAGEMENT-BUSINESS 3.0 UNITS
Class hours: 3.0 Lecture
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 114
SALES 3.0 UNITS
Class hours: 3.0 Lecture
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 115
OPERATING BUSINESS 3.0 UNITS
Class hours: 3.0 Lecture
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. This course can be taken in either a traditional or an online learning environment.
Transfer Credit: CSU

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BA 123
FUNDAMENTALS OF RETAILING 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
This course is an introduction to Total Quality Management (TQM) 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. This course can be taken in either a traditional or an online learning environment.
Transfer Credit: CSU

BA 152
FUNDAMENTALS OF IMPORTING AND EXPORTING 3.0 UNITS
Class hours: 3.0 Lecture
This course offers the basics of importing and exporting, including U.S. Customs Service, customs brokers, duty rates, laws and regulations, currency exchange and letters of credit, storage, transportation, financing, terms of access, documentation, trade patterns by countries and commodities. This course can be taken in either a traditional or online learning environment. (Formerly BA 52)
Transfer Credit: CSU

BA 153
SMALL BUSINESS MANAGEMENT 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: BA 101 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
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 change, 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 157
PRINCIPLES OF PUBLIC RELATIONS 3.0 UNITS
Class hours: 3.0 Lecture
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. This course is not available for students who are enrolled in or have completed JOUR 157.
Transfer Credit: CSU

BA 171
BUSINESS ADMINISTRATION WORK EXPERIENCE 1.0 UNIT
Class hours: 1 lecture
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.
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

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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

BA 173
BUSINESS ADMINISTRATION
WORK EXPERIENCE    3.0 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 240 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 174
BUSINESS ADMINISTRATION
WORK EXPERIENCE    4.0 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 200
PRINCIPLES OF BANKING    3.0 UNITS
Class hours: 3.0 Lecture
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    3.0 UNITS
Class hours: 3.0 Lecture
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 203
MANAGEMENT DEPARTMENT OPERATIONS    3.0 UNITS
Class hours: 3.0 Lecture
This course is designed to provide the student with an awareness and appreciation of staff-supported activities in an organization. The

Transfer Credit: CSU

BA 204
PROJECT MANAGEMENT    3.0 UNITS
Class hours: 3.0 Lecture
This course presents the essential knowledge and skills students need to make effective contributions and to have an immediate impact on the accomplishment of projects in which they are involved. It is for everyone involved in projects, not just project managers, in order to succeed in interdisciplinary and cross-functional teams. This course provides the foundation students need to be effective members of project teams and, thereby, boost everyone’s potential to rise to the challenge of managing teams and projects.

Transfer Credit: CSU

BA 205
ORGANIZATIONAL LEADERSHIP    3.0 UNITS
Class hours: 3.0 Lecture
This course is designed to introduce the student to the concepts, issues, and practices that comprise the core of organizational leadership from a business and global perspective. It describes the core leadership theories, analyzes them in terms of business success, and examines leadership as it unfolds in the workplace. The various styles of leadership are identified, and the methods of developing, or improving, the student’s own leadership skills are discussed.

Transfer Credit: CSU

BA 298
DIRECTED STUDIES    1.0 UNIT
Class hours: 3.0 Independent Study
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

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BA 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

BUSINESS COMMUNICATIONS
(Business Division)

BCOM 45 (Not Degree Applicable)
EFFECTIVE COMMUNICATION FOR MANAGERS 3.0 UNITS
Class hours: 3.0 Lecture
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 46 (Not Degree Applicable)
BUSINESS COMMUNICATIONS 3.0 UNITS
Class hours: 3.0 Lecture
This course reviews the fundamentals of grammar, sentence structure, punctuation, capitalization, spelling, and business vocabulary building. Completion of this 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
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 60
CUSTOMER SERVICE/TELEPHONE TECHNIQUES 1.0 UNIT
Class hours: 1.0 Lecture
This course teaches the importance of effective telephone techniques in the business office and the correct manner of identifying customer wants and needs. (Formerly BCOT 60)

BCOM 98
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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.

BCOM 99
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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.

BCOM 147
BUSINESS COMMUNICATIONS 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: BCOM 46 or equivalent with a grade of Pass or "C" or higher. Recommendation: BCOM 147 and ENGL 100 or equivalent with grades of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: BCOM 147 or ENGL 52 or equivalent with a grade of Pass or "C" or higher. 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 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: BCOM 147 or ENGL 100 or equivalent with a grade of Pass 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 do's 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 1.0 UNIT
Class hours: 1.0 Lecture/0.5 Laboratory
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
designated to correlate with the content coverage of primary business communication texts.  

Transfer Credit: CSU

**BCOT 152**  
**JOB SEARCH IN THE BUSINESS FIELD**  
1.5 UNITS  
Class hours: 1.5 Lecture  
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 for a maximum of 2 times.  
Transfer Credit: CSU

**BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES**  
(Business Division)

**BCOT 3T (Not Degree Applicable)**  
**BUSINESS COMMUNICATIONS, WORD PROCESSING, OR KEYBOARDING TUTORIAL**  
0.5 UNIT  
Class hours: 2.0 Laboratory  
Corequisite: Enrollment in any BCOM 147, BCOM word processing or keyboarding courses.  
This course is designed to facilitate and reinforce the learning of word processing functions, skills, and concepts through individualized and mediated instruction. This course is open to any student enrolled in BCOM business communications, any BCOT word processing or keyboarding course. This course may be taken a maximum of 4 times.

**BCOT 5A (Not Degree Applicable)**  
**WORD MODULE**  
0.5 UNIT  
Class hours: 0.3 Lecture/0.6 Laboratory  
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 for a maximum of 2 times.

**BCOT 5B (Not Degree Applicable)**  
**EXCEL MODULE**  
0.5 UNIT  
Class hours: 0.3 Lecture/0.6 Laboratory  
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 for a maximum of 2 times.

**BCOT 5D (Not Degree Applicable)**  
**POWERPOINT/INTERNET MODULE**  
0.5 UNIT  
Class hours: 0.3 Lecture/0.6 Laboratory  
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. The modules will also include the basic concepts and use of PowerPoint, a presentation application, and a basic introduction to the Internet and creating Web Pages. This course may be taken for a maximum of 2 times.

**BCOT 5T**  
**INDIVIDUALIZED COMPUTER LITERACY SKILLS**  
0.5 UNIT  
Class hours: 1.1 Laboratory  
This course increases the business students understanding 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 52**  
**DATA ENTRY**  
2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
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 will also 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**  
2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
Prerequisite: BCOT 52 or equivalent with a grade of Pass or "C" or higher.  
Recommendation: Ability to type 30 wpm and familiarity with the microcomputer, e-mail, and e-mail 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-faceted 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 62**  
**COMPUTER KEYBOARDING**  
1.0 UNIT  
Class hours: 1.0 Lecture/0.5 Laboratory  
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**  
1.0 UNIT  
Class hours: 1.0 Lecture/0.5 Laboratory  
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
This course is designed to prepare students for concurrent enrollment in BCOT 3T. Recommendation: BCOT 131 or equivalent. Class hours: 3.0 Lecture/2.0 Laboratory

BCOT 81
LEGAL OFFICE TERMINOLOGY/VOCABULARY 1.5 UNITS
Class hours: 1.5 Lecture
Prerequisite: SPAN 112 or SPAN 201 or equivalent with a grade of Pass or "C" or higher.
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 91
MICROSOFT WORD
EXPERT LEVEL 1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Recommendation: Concurrent enrollment in BCOT 3T.
This course emphasizes advanced 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 92
MICROSOFT EXCEL
CORE LEVEL 1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
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 independently toward their respective goals. This course may be taken for 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
TRANSCRIPT 4.0 UNITS
Class hours: 4.0 Lecture/2.0 Laboratory
Prerequisite: BCOT 131 or BCOT 132, BCOT 162, BCOM 46, and MA 161 or equivalent with grades of Pass or "C" or higher.
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: 3.0 Lecture/2.0 Laboratory
Recommendation: MA 60, MA 161 and concurrent enrollment in BCOT 3T.
This course prepares the 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 80
PROCESSING LAW OFFICE DOCUMENTS 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
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 4.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: BCOT 131 or equivalent with a grade of Pass or "C" or higher.
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 requirement for Court Reporting certification. This course may 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 Pass or "C" or higher.
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: 4.0 Lecture/2.0 Laboratory
Prerequisite: BCOT 131 or BCOT 132, BCOT 162, and BCOM 46 or equivalent with grades of Pass or "C" or higher.
Recommendation: Concurrent enrollment in BCOT 3T and the ability to type 30 wpm.
This course is designed to teach and reinforce medical/legal terminology. Students will know the spelling, correct gender, and word origin of approximately 900 medical/legal terms. This course will also introduce students 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 89
INTERNET AS A BUSINESS COMMUNICATION TOOL 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
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/1.0 Laboratory
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.

Announcement of Courses

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All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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.

**BCOT 93 MICROSOFT EXCEL EXPERT LEVEL 1.5 UNITS**

Class hours: 1.5 Lecture/1.0 Laboratory Recommendation: Concurrent enrollment in BCOT 3T.

This course emphasizes advanced spreadsheet functions on the IBM compatible personal computers using Microsoft Excel for Windows software. Topics 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; 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 95 MICROSOFT ONENOTE 1.0 UNIT**

Class hours: 1.0 Lecture/0.5 Laboratory Recommendation: Concurrent enrollment in BCOT 3T.

This course will teach the fundamentals of Microsoft OneNote, a note-taking program. The course will expose students to practical examples of the computer as a useful tool. It will acquaint students with organizing, storing, and using notes electronically for school lectures, work, personal, office, etc. It will develop an exercise-oriented approach that allows learning by doing. Students will learn to create pages that are organized in sections, just as in a physical notebook; and if they enter handwriting from a Tablet PC, OneNote can convert handwriting to text. Students will learn to incorporate pictures and data into their notes as well as many other features.

**BCOT 96 MICROSOFT POWERPOINT 1.5 UNITS**

Class hours: 1.5 Lecture/1.0 Laboratory Recommendation: Concurrent enrollment in BCOT 3T.

This course introduces the student to Microsoft PowerPoint software applications. Topics include Microsoft PowerPoint functions: 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 Certified Application Specialist (MCAS) certification for Microsoft PowerPoint. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment. This course may be taken a maximum of 2 times.

**BCOT 97 MICROSOFT OUTLOOK 1.5 UNITS**

Class hours: 1.5 Lecture/1.0 Laboratory Recommendation: Concurrent enrollment in BCOT 3T.

This course introduces the student to Microsoft Outlook software applications. Topics include Microsoft Outlook functions: sending and receiving e-mail, organizing schedules and events, and maintaining contact lists, to-do lists, notes, and a journal. This course prepares the student for Microsoft Certified Application Specialist (MCAS) certification for MS Outlook. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment. This course may be taken a maximum of 2 times.

**BCOT 98 DIRECTED STUDIES 1.0 UNIT**

Class hours: 3.0 Independent Study

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.

**BCOT 99 DIRECTED STUDIES 2.0 UNITS**

Class hours: 6.0 Independent Study

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.

**BCOT 108 WORDPERFECT FOR WINDOWS 3.5 UNITS**

Class hours: 3.0 Lecture/2.0 Laboratory Recommendation: Ability to type 30 wpm and concurrent enrollment in BCOT 3T.

This course offers students the opportunity to learn WordPerfect for Windows, which is an advanced word processing program. This course will further prepare students for a successful business career. This course can be taken in either a traditional or an online learning environment.

**Transfer Credit: CSU**

**BCOT 111 MS PROJECT FOR OFFICE PROFESSIONALS 1.5 UNITS**

Class hours: 1.5 Lecture/0.8 Laboratory

This course teaches Microsoft Project software application for administrative assistants and office support staff. It is a course that concentrates on showing students the step-by-step application procedures to create a business project plan using the Microsoft Project software. Students will learn to create a complete project schedule with tasks and task relationships. They will edit and organize a project, assign resources to the tasks, use Project views to get information, format, and print views, Gantt charts, calendars, and reports. Students will learn to sort, find, and filter tasks or resources in a project; administer the project’s resources, administer and view cost information, and track the completion of tasks in the project. This course will also prepare students for the Microsoft Certified Application Specialist (MCAS) exam. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**BCOT 112 MICROSOFT WORD FOR WINDOWS 3.5 UNITS**

Class hours: 3.0 Lecture/2.0 Laboratory Recommendation: Ability to type 30 wpm and concurrent enrollment.

This course introduces the student to Microsoft Word software applications. Topics include Microsoft Word functions: 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 exploring the Internet, 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 Certified Application Specialist (MCAS) certification for Microsoft Word. 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). This course may be taken a maximum of 2 times.

Transfer Credit: CSU

BCOT 113 MICROSOFT EXCEL  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: Concurrent enrollment in BCOT 3T.
This course introduces the student to Microsoft Excel software applications. Topics include Microsoft Excel functions: 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, creating maps, 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 databases. This course prepares the student for Microsoft Certifies Application Specialist (MCAS) certification for Microsoft Excel. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online learning environment. This course may be taken a maximum of 2 times. (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: 3.0 Lecture/2.0 Laboratory
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: 3.0 Lecture/2.0 Laboratory
Prerequisite: BCOT 114 or equivalent with a grade of Pass of "C" or higher.
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 Microsoft Office Specialist Certification (MOS) 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/1.0 Laboratory
Prerequisite: BCOT 112 or equivalent with a grade of Pass of "C" higher.
Recommendation: Concurrent enrollment in BCOT 3T.
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/1.0 Laboratory
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 environment.

Transfer Credit: CSU

BCOT 120 INTEGRATED BUSINESS OFFICE PROJECTS  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: BCOT 114 or BCOT 112, BCOT 113, and BCOT 96, with grades of Pass or "C" or higher.
Recommendation: Concurrent enrollment in BCOT 3T.
This course is a realistic business office simulation designed to help students reinforce and build software skills, improve Internet skills, and develop teamwork and critical thinking skills. Through simulation, students will work as an administrative assistant in the operation of a small business as they work through various departments for the owner of a company. Projects assigned contain numerous related jobs of varying difficulty. Each job begins with a list of software skills that students will apply. Some jobs are further divided into related tasks. General information and step-by-step directions are provided for completing jobs. Students will work from source documents provided in the text and use data files to complete jobs.

Transfer Credit: CSU

BCOT 131 BEGINNING COLLEGE KEYBOARDING & DOCUMENT PROCESSING  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
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**

2.0 UNITS

Class hours: 2.0 Lecture/1.0 Laboratory

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: 3.0 Lecture/2.0 Laboratory

Prerequisite: BCOT 131 or BCOT 132 or equivalent with a grade of Pass 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 online learning environment. (Formerly BCOT 61)

*Transfer Credit: CSU*

**BCOT 155**

**ADMINISTRATIVE SECRETARIAL PROCEDURES**

4.0 UNITS

Class hours: 3.0 Lecture/2.0 Laboratory

Recommendation: BCOT 131 or equivalent with a grade of Pass 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**

1.0 UNIT

Class hours: 1.0 Lecture/0.5 Laboratory

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**

3.0 UNITS

Class hours: 3.0 Lecture

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 typing, 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: 4.0 Lecture/2.0 Laboratory

Prerequisite: BCOT 131 or BCOT 132, or BCOT 162 and BCOM 46, or equivalent courses with grades of Pass 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**

**BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE**

3.0 UNITS

Class hours: 1 hour/week coordination class.

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*

**BCOT 174**

**BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE**

4.0 UNITS

Class hours: 1 hour/week coordination class.

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*
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

CHEMISTRY
(Science, Engineering, Mathematics Division)

CHEM 100  (CAN CHEM 6)  INTRODUCTORY CHEMISTRY  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: MATH 40 or equivalent with a grade of Pass 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, 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.

Transfer Credit: CSU

CHEM 110  ELEMENTARY CHEMISTRY  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Pass or "C" or higher or satisfactory completion of the Math Placement Process. Recommendation: It is strongly recommended that the preceding prerequisite be completed with in 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.

Transfer Credit: CSU; UC.*

*UC credit limits may apply: CHEM 100 and CHEM 110 combined: maximum credit, one course. No credit for CHEM 100 or CHEM 110 if taken after CHEM 111.

CHEM 112  (CAN CHEM 4)  (CAN CHEM SEQ A)  GENERAL CHEMISTRY  5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Prerequisite: CHEM 111 or equivalent with a grade of Pass or "C" or higher. This course is the first part of a one-year Organic Chemistry course that includes topics on the properties and reactions of aliphatic and aromatic organic compounds. Emphasis is placed on reaction mechanisms, fundamental principles, and modern instrumental methods. The laboratory experiments will stress synthesis, techniques, and spectroscopic and qualitative analysis.

Transfer Credit: CSU; UC

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.

Transfer Credit: CSU; UC

CHEM 205  QUANTITATIVE ANALYSIS CHEMISTRY  4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: CHEM 112 or equivalent with a grade of Pass 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.

Transfer Credit: CSU; UC

CHEM 211  ORGANIC CHEMISTRY  5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Prerequisite: CHEM 112 or equivalent with a grade of Pass 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. This course is the first part of a one-year Organic Chemistry course that includes topics on the properties and reactions of aliphatic and aromatic organic compounds. Emphasis is placed on reaction mechanisms, fundamental principles, and modern instrumental methods. The laboratory experiments will stress synthesis, techniques, and spectroscopic and qualitative analysis.

Transfer Credit: CSU; UC

CHEM 212  ORGANIC CHEMISTRY  5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Prerequisite: CHEM 211 or equivalent with a grade of Pass 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 212. This course is the second part of a one-year...
Organic Chemistry course that includes topics on the properties, and reactions of aliphatic and aromatic organic compounds. Emphasis is placed on reaction mechanisms, fundamental principles and modern instrumental methods. The laboratory experiments will stress synthesis, techniques, and spectroscopic and qualitative analysis.

Transfer Credit: CSU; UC

**CHEM 250L**
**SPECIAL TOPICS IN CHEMISTRY  1.0 UNIT**
Class hours: 3.0 Laboratory
Prerequisite: CHEM 111 or equivalent with a grade of Pass of "C" or higher or equivalent.
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 for a maximum of 2 times.

Transfer Credit: CSU, UC credit determined after admission

**CHEM 299**
**DIRECTED STUDIES  2.0 UNITS**
Class hours: 0.3 Independent Study
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

**CD 299**
**DIRECTED STUDIES  2.0 UNITS**
Class hours: 6.0 Independent Study
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.

Transfer Credit: CSU

**Announcement of Courses**

**CD 110**
**CHILD DEVELOPMENT  3.0 UNITS**
Class hours: 3.0 Lecture
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 Services Classification Indicator DS 1.

Transfer Credit: CSU; UC

**CD 112**
**THE CHILD IN A DIVERSE SOCIETY  3.0 UNITS**
Class hours: 3.0 Lecture
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  3.0 UNITS**
Class hours: 3.0 Lecture
Recommendation: CDEC 111 and CD 110 or equivalent with grades of Pass 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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

CHILD DEVELOPMENT/EARLY CHILDHOOD
(Health Occupations Division)

CDEC 62
EXPRESSION OF CREATIVE ART
EXPRESSION BY CHILDREN 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: CDEC 112 or equivalent with a grade of Pass 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 DS3.

CDEC 63
EARLY CHILDHOOD
EXPERIENCE IN LANGUAGE
ARTS AND SOCIAL SCIENCES 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: CDEC 112 or equivalent with a grade of Pass 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 DS3.

CDEC 65
MUSIC AND MOVEMENT
FOR CHILDREN 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: CDEC 112 or equivalent with a grade of Pass 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 DS3.

CDEC 66
ADVANCED ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD EDUCATION PROGRAMS 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: CD 110, CDEC 111, CDEC 112, and CDEC 113 or equivalent with grades of Pass 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 6.

CDEC 67
ADVANCED ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD EDUCATION PROGRAMS 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: CDEC 66 or equivalent with a grade of Pass or "C" or higher.
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 3.0 UNITS
Class hours: 3.0 Lecture
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.

CDEC 112
EARLY CHILDHOOD EDUCATION CURRICULUM 3.0 UNITS
Class hours: 3.0 Lecture
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 7.

CDEC 113
THE CHILD, FAMILY AND COMMUNITY 3.0 UNITS
Class hours: 3.0 Lecture
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, childcare facilities, the peer group, the mass media, and the community. Also examined are how these forces interact to socialize and produce the child's values, morals, attitudes, behavior, and self-esteem. This course meets the Department of Social Services Classification Indicator DS 2.

CDEC 133
EARLY CHILDHOOD EXPERIENCES IN MATHEMATICS AND SCIENCE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: CDEC 112 or equivalent with a grade of Pass 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.

CDEC 161
NUTRITION, HEALTH, AND SAFETY IN CHILDREN'S PROGRAMS 3.0 UNITS
Class hours: 3.0 Lecture
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 7. (Formerly CDEC 61)

Transfer Credit: CSU
CDEC 164  
**EARLY CHILDHOOD EDUCATION PRAXICUM**  
3.0 UNITS  
Class hours: 2.0 Lecture/3.0 Laboratory  
Prerequisite: CDEC 111 and CDEC 112 or equivalent with grades of Pass 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 practice 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 per week in placement for a total of 51 hours per 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 174  
**EARLY CHILDHOOD EDUCATION OCCUPATIONAL WORK EXPERIENCE**  
4.0 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. Corequisite: Enrollment in Child Development vocational program or 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 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.  
*Transfer Credit: CSU*

CDEC 230  
**ADULT SUPERVISION IN CHILD CARE PROGRAMS**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Prerequisite: CD 110, CDEC 111, CDEC 112, and CDEC 113 or equivalent with grades of Pass or "C" or higher.  
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*

CDEC 298  
**DIRECTED STUDIES**  
1.0 UNIT  
Class hours: 3.0 Independent Study  
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*

CDEC 299  
**DIRECTED STUDIES**  
2.0 UNITS  
Class hours: 6.0 Independent Study  
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*

CDEC 10  
**FAMILY CHILD CARE PROVIDERS**  
(Not Degree Applicable)  
3.0 UNITS  
Class hours: 3.0 Lecture  
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  
EDUCATIONAL PARAPROFESSIONAL OCCUPATIONAL WORK EXPERIENCE  3.0 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 EXPERIENCE  3.0 UNITS  
Class hours: 3.0 Lecture  
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  3.0 UNITS  
Class hours: 1.0 Lecture/6.0 Laboratory  
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/multiethnic 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  3.0 UNITS  
Class hours: 3.0 Lecture  
Prerequisite: CD 110 or equivalent with a grade of Pass 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  3.0 UNITS  
Class hours: 3.0 Lecture  
Prerequisite: CD 110 or equivalent with a grade of Pass 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 DS4. (Formerly CDIT 51)  
Transfer Credit: CSU

CHILD DEVELOPMENT/PARENT EDUCATION  
(Health Occupations Division)  

CDPE 10 (Not Degree Applicable)  
INTRODUCTION TO FAMILY DEVELOPMENT  3.0 UNITS  
Class hours: 3.0 Lecture  
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/SCHOOL AGE  
(Health Occupations Division)  

CDSA 152  
SCHOOL-AGE CHILD CARE SUPERVISION AND ADMINISTRATION  3.0 UNITS  
Class hours: 3.0 Lecture  
Prerequisite: CD 110 or equivalent with a grade of Pass 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
Announcement of Courses

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 3.0 UNITS
Class hours: 3.0 Lecture
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 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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 once 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.

CDSA 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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.

CHILD DEVELOPMENT/SPECIAL EDUCATION

(Health Occupations Division)

CDSA 259
SCHOOL-AGE CHILD
CARE PRACTICUM 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: CDSA 155 or equivalent with a grade of Pass 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

CDSA 52
SPECIAL EDUCATION INCLUSION IN EARLY CHILDHOOD PROGRAMS 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
This course provides an overview of the field of 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.

CHINESE

(Liberal Arts Division)

CHIN 101
ELEMENTARY CHINESE 5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
This beginning Chinese course emphasizes the acquisition of basic skills in pronunciation, listening, speaking, reading, writing, and the grammar and vocabulary necessary to acquire skills. Students will also be introduced to the customs, culture, and geography of China.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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: 1.5 Lecture/1.0 Laboratory
Prerequisite: CIS 105 or equivalent with a grade of Pass or "C" or higher.
This course provides an introduction to the functions of Microsoft Excel for Windows spreadsheet. The fundamentals of building worksheets include creating worksheets, cell formatting, functions, formulas, Wizards, and the creation of basic charts. Techniques to deal with large worksheets are covered. Templates, macros and database functions are previewed. Hands-on exercises are used to reinforce the functions of Excel.

CIS 54B
EXCEL FOR WINDOWS PART 2  1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Prerequisite: CIS 54A or equivalent with a grade of Pass or "C" or higher.
This course continues to explore the functions of Microsoft Excel for Windows spreadsheet. The fundamentals of building worksheets will include creating worksheets, cell 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: 1.5 Lecture/1.0 Laboratory
Prerequisite: CIS 50 or equivalent with a grade of Pass or "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
WIN DOWS FOR COMPTIA A+ CERTIFICATE EXAMS  1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Prerequisite: CIS 50 or equivalent with a grade of Pass or "C" or higher.
This course is designed to help the student prepare for the Microsoft certification test for the CompTIAA+ 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 CIS 56.
CIS 70B
NETWORK+ CERTIFICATION  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 101 or equivalent with a grade of Pass or "C" or higher.
This course offers training in the knowledge and skills required by the CompTIA (The Computer Technology Industry Association) for its Network+ certification. Topics include network fundamentals, local area network implementation, basic systems administration, and various network protocols and devices.

CIS 70D
INTRODUCTION TO TCP/IP  1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Recommendation: CIS 70A or equivalent with a grade of Pass 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, components, and protocols 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 routing, TCP/IP addressing and subnets, and hover 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: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 70A or equivalent with a grade of Pass or "C" or higher or appropriate work experience.
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: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 70E or equivalent with a grade of Pass or "C" or higher or appropriate work experience.
This is the third in a series of courses that prepares students for certification as a Cisco Certified Network Associate (CCNA). This course 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: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 70E or equivalent with a grade of Pass or "C" or higher.
This is the fourth in a series of courses that prepare 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: 2.5 Lecture
Prerequisite: CIS 70F or equivalent with a grade of Pass or "C" or higher.
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 70J
CISCO CCNA CERTIFICATION EXAM REVIEW  1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Recommendation: CIS 70G or equivalent with a grade of Pass 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 NETWORK  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: CIS 70A or equivalent with a grade of Pass 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 FUNDAMENTALS  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 70A or equivalent with a grade of Pass 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 75
SQL ADMINISTRATION AND IMPLEMENTATION  3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 212 or equivalent with a grade of Pass or "C" or higher is strongly recommended.
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 80
PROGRAMMING IN ACCESS  3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 155 and CIS 187 or equivalent with grades of Pass or "C" or higher are strongly recommended.
This course provides students with the knowledge and skills required to program Access applications using Visual Basic for Application. The students will design and create real-world business applications.

CIS 84
MICROSOFT INTERNET INFORMATION SERVER  1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Recommendation: Strongly recommend CIS 212 or CIS 212B and CIS 121 or equivalent with grades of Pass 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: 3.0 Lecture/2.0 Laboratory  
Recommendation: CIS 56 with a grade of Pass 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 pine; 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.  

Transfer Credit: CSU; UC*  

*CUCredit limits may apply: CIS 101 and 102  

CIS 101  
(CAN BUS 6)  
INTRODUCTION TO COMPUTER INFORMATION SYSTEMS  3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
This course provides the student with the essential knowledge required for a well-rounded understanding of the use of the computer as a tool to produce useful information in small and large work environments. The course allows the student to achieve an understanding of computer technology, computer hardware, computer software and how computers can be used to produce meaningful information. The student will solve applied problems in spreadsheet preparation and analysis using Microsoft EXCEL and in database programming using Access.  

Transfer Credit: CSU; UC*  

*UC credit limits may apply: CIS 101 and 102 combined: maximum credit, one course.  

CIS 102  
INTRODUCTION TO MICROCOMPUTER HARDWARE AND APPLICATION SOFTWARE  3.0 UNITS  
Class hours: 3.0 Lecture/2.0 Laboratory  
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.  

Transfer 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: 3.0 Lecture/2.0 Laboratory  
Recommendation: Concurrent enrollment in or completion of CIS 101 or CIS 102 or equivalent with a grade of Pass 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 flowcharts 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.  

Transfer Credit: CSU; UC*  

CIS 105  
USING MICROSOFT WINDOWS  1.5 UNITS  
Class hours: 1.5 Lecture/0.5 Laboratory  
Recommendation: CIS 102 or equivalent with a grade of Pass 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 to the Internet, and exchanging data. Current topics of interest relating to Windows will also be discussed.  

Transfer Credit: CSU  

CIS 105B  
MICROSOFT WINDOWS MOBILE  3.0 UNITS  
Class hours: 3.0 Lecture/0.5 Laboratory  
This course offers technical training in the Microsoft Windows Mobile (WM) technology. Students will learn the technical background of the WM operating systems, various communication protocols used on the WM-based devices, and their applications. Troubleshooting techniques and software development tools will be discussed. This course is designed for students interested in the technical support of the WM operations in an enterprise environment. This course may be taken a maximum of 2 times.  

Transfer Credit: CSU  

CIS 120  
WEB DESIGN WITH MICROSOFT FRONT PAGE  1.5 UNITS  
Class hours: 1.5 Lecture/1.0 Laboratory  
Prerequisite: CIS 121 or equivalent with a grade of Pass or “C” or higher.  
This course covers the features and capabilities of FrontPage. Students learn how to create Web pages with FrontPage. The Web design projects provide a practical application of Web development with a real world environment.  

Transfer Credit: CSU  

CIS 121  
INTERNET FOR INFORMATION SYSTEM/INFORMATION TECHNOLOGY  1.5 UNITS  
Class hours: 1.5 Lecture/0.5 Laboratory  
This course will cover the fundamental features of the Internet and represents a foundation class for Information Technology. Students will learn how to access and use the Internet. Topics covered will include electronic mail, File Transfer Protocols, Telnet, Search tools for various Internet resources, World Wide Web’s, newsgroups, Listserv, BBS (Bulletin Board Service) and other resources. The Internet as a Wide Area Network will be reviewed.  

Transfer Credit: CSU  

CIS 125  
JAVASCRIPT FOR PROGRAMMERS  1.5 UNITS  
Class hours: 1.5 Lecture/1.0 Laboratory  
Prerequisite: CIS 205 and a knowledge in one programming language or equivalent with grades of Pass or “C” or higher.  
This course covers the JavaScript programming language. Students learn how to enhance the Web pages to be interactive, intelligent, and exciting with JavaScript. The course projects provide a practical application of Web page developments with a real world environment.  

Transfer Credit: CSU  

CIS 126  
JAVASCRIPT FOR NONPROGRAMMERS  3.5 UNITS  
Class hours: 3.0 Lecture/2.0 Laboratory  
Prerequisite: CIS 205 and a knowledge in one programming language or equivalent with grades of Pass or “C” or higher.  
This is a course in programming Web pages on the client-side using the JavaScript programming language. It is for beginning to intermediate level students who know how to create Web pages and now want to add interactivity to their Web pages. This course is designed for the students who are not familiar with programming language.  

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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/restores, 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: 1.5 Lecture/1.0 Laboratory

Recommendation: CIS 101 or equivalent with a grade of Pass or "C" or higher. 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 151

MICROSOFT EXCEL FOR INFORMATION SYSTEMS/INFORMATION TECHNOLOGY 3.5 UNITS

Class hours: 3.0 Lecture/2.0 Laboratory

This course is a foundation class for Information Technology. The fundamentals of building worksheets include: creating worksheets, formatting, 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 155B

MICROSOFT ACCESS EXPERT LEVEL 1.5 UNITS

Class hours: 1.5 Lecture/0.9 Laboratory

Prerequisite: CIS 155A or equivalent with a grade of Pass or "C" or higher. 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 basic for Applications (VBA) programming language. Students will learn to automate repetitive tasks, protect spreadsheets from user errors, and create user interfaces. Topics covered will include how to write program procedures using the sequence, selection, and repetition programming structures, as well as how to create and implement dialog boxes, lists, and option/check box controls in Excel. This course may be taken a maximum of 3 times.

Transfer Credit: CSU

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

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: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 205
This course provides the knowledge, skills, and hands-on experience needed to create multimedia 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 a 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 163
DYNAMIC AND INTERACTIVE WEB PAGE SCRIPTING 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 205 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This hands-on course will explore the latest Web development technologies to create dynamic and interactive Web pages. Topics to be discussed include validating pages to current Web standards, controlling the appearance of the content on Web page accessibility, and enhancing the interactivity and visual appeal of Web pages. Transfer Credit: CSU

CIS 169A
SPECIAL TOPICS IN SECURITY 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
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: 3.0 Lecture/2.0 Laboratory
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 170
JAVA PROGRAMMING 3.5 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: BCIS 95.
This course introduces C and C++ programming language structures. Topics include input/output techniques, declaration statements, data types, branching, loops, arrays, subroutines, functions, passing parameters, sorting and searching. Transfer Credit: CSU; UC

CIS 175
RPG PROGRAMMING 3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 103 or equivalent with a grade of Pass or "C" or higher.
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

CIS 176
COBOL PROGRAMMING 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: CIS 103 or equivalent with a grade of Pass or "C" or higher.
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 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: MA TH 140 or equivalent with a grade of Pass or "C" or higher and satisfactory score on the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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, looping, arrays, subroutines, functions, passing parameters, sorting and searching. Transfer Credit: CSU; UC

CIS 180
PROGRAMMING IN C/C++ 3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 103 or equivalent with a grade of Pass or "C" or higher.
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 182
JAVA PROGRAMMING 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: Strongly recommend CIS 103 or equivalent with a grade of Pass 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 186
VISUAL BASIC.NET PROGRAMMING 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 103 or equivalent with a grade of Credit or "C" or higher or knowledge of one programming language.
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 1.0 UNIT
Class hours: 1.0 Lecture
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 109A and/or CIS 189C no more than a total of 4 times.
Transfer Credit: CSU, UC credit determined after admission

CIS 189B
SPECIAL TOPICS IN SOFTWARE DEVELOPMENT 2.0 UNITS
Class hours: 2.0 Lecture
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 189C
SPECIAL TOPICS IN SOFTWARE DEVELOPMENT 3.0 UNITS
Class hours: 3.0 Lecture
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: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 103 or equivalent with a grade of Pass 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 189G
SPECIAL TOPICS IN SOFTWARE DEVELOPMENT 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 103 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
This course is a detailed study of business systems analysis and design theory and application techniques. Includes interviewing techniques, systems functions, surveys, diagramming, analysis, design, and testing. The systems development life cycle, structured design and object-oriented design methodologies will be studied. Attention is given to the role of the systems analyst within the business environment.
Transfer Credit: CSU

CIS 202A
PROJECT MANAGEMENT FOR INFORMATION TECHNOLOGY 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 102 and CIS 105 or equivalent with grades of Pass 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 202B
MICROSOFT PROJECT 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 102 or equivalent with a grade of Pass or "C" or higher or appropriate work experience.
This hands-on course will show the student how to create, track, and report project plans using Microsoft Project. Students will learn how to add task dependencies, assign resources, track costs, use different project views, and share project information with others. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

CIS 205
XML WEB APPLICATION DEVELOPMENT FOR THE WORLD WIDE WEB 1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Recommendation: CIS 103 or CIS 121 or equivalent with a grade of Pass 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: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 205 or equivalent with a grade of Pass 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, Document 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: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 105 or equivalent with a grade of Pass or "C" or higher.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 103 and CIS 155 or equivalent with grades of Pass 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: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 208A or equivalent with a grade of Pass or “C” or higher, or appropriate work experience.

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: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 212 or equivalent with a grade of Pass 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 1.0 UNIT

Class hours: 1.0 Lecture
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 2.0 UNITS

Class hours: 2.0 Lecture
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 3.0 UNITS

Class hours: 3.0 Lecture
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
INTRODUCTION TO MICROSOFT WINDOWS ADMINISTRATION 3.5 UNITS

Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 58A or equivalent with a grade of Pass or “C” or higher

This is a course for system administrators who are responsible for installing and administering networks based on the current Windows operating systems. Students will learn how to install, configure, and optimize the current Windows operating systems, including network inter-operability and troubleshooting.

Transfer Credit: CSU

CIS 212A
MICROSOFT WINDOWS 2000 PROFESSIONAL 3.5 UNITS

Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 105 or equivalent with a grade of Pass or “C” or higher.

This is a course for system administrators who are responsible for installing and administering networks based on Windows 2000. Students will learn to install, configure, and optimize Windows 2000, including network inter-operability and troubleshooting.

Transfer Credit: CSU

CIS 212B
MICROSOFT WINDOWS 2000 SERVER 3.5 UNITS

Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 212A or equivalent with a grade of Pass or “C” or higher.

This is a course for system administrators who are responsible for installing and administering 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 213A
MICROSOFT WINDOWS ACTIVE DIRECTORY SERVICES 3.5 UNITS

Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 212 or equivalent with a grade of Pass or “C” or higher, or appropriate work experience.

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...
This course provides students with the information and skills needed to create a networked 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 213D**

**DESIGNING A MS WINDOWS 2000 NETWORK INFRASTRUCTURE 2.5 UNITS**

Class hours: 2.5 Lecture

Prerequisite: CIS 212 or equivalent with a grade of Pass or “C” or higher, or appropriate work experience.

This course prepares students for the Microsoft Certified Professional (MCP) Exam 70-275, a core requirement on both the Microsoft Certified Systems Engineer (MCSE) and Microsoft Certified System Administrator (MCSA) tracks.

**Transfer Credit: CSU**

**CIS 213E**

**MANAGING WINDOWS 2000 NETWORK ENVIRONMENT 3.0 UNITS**

Class hours: 3.0 Lecture/1.0 Laboratory

Recommendation: CIS 212 or equivalent with a grade of Pass or “C” or higher. This course is to provide the knowledge required by System Administrators, Network Administrators, and Information Technology (IT) professionals who design, implement, and manage 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 213F**

**MICROSOFT WINDOWS 2003 SERVER ADMINISTRATION 3.5 UNITS**

Class hours: 3.0 Lecture/2.0 Laboratory

Recommendation: CIS 70A or equivalent with a grade of Pass or “C” or higher. This course provides instruction in planning, implementing, and administering a Windows 2003 network infrastructure. Topics include Domain Name System (DNS), Internet Protocol (IP) routing, Network Address Translation (NAT), and Certificate Services. This course covers the knowledge and skills necessary to design a Windows® 2003 directory services infrastructure in a large computing environment. 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 70-291, and the Microsoft Certified Professional (MCP) certification examinations: Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure (70-291) and Planning and Maintaining a Microsoft Windows Server 2003 Network Infrastructure (70-293), which are part of the core requirements for the Microsoft Certified Systems Engineer (MCSE) certification.

**Transfer Credit: CSU**

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
CIS 213K
DESIGNING WINDOWS ACTIVE DIRECTORY AND NETWORK INFRASTRUCTURE 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
This course will help students develop skills and knowledge necessary to design an organization’s active directory and network infrastructure. In addition, this course will prepare students for the Microsoft Certified Systems Engineer (MCSE) certification.
Transfer Credit: CSU

CIS 214
UNIX 3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
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 221A
OBJECT-ORIENTED PROGRAMMING IN VB.NET 3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 186 or equivalent with a grade of Pass or "C" or higher.
This course provides the students with the knowledge and skills required to create and use .NET objects and Windows forms applications. This course will cover writing objects, events, properties, callbacks, inheritance, interfaces, polymorphism .NET assemblies, multithreading and Internet communications.
Transfer Credit: CSU

CIS 221B
DATABASE AND WEB PROGRAMMING IN VB.NET 3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 186 or equivalent with a grade of Pass or "C" or higher.
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: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 175 or equivalent with a grade of Pass or "C" or higher.
This is a second course in the use of the RPG programming language in which emphasis is placed on using the more advanced features of the language. Students are introduced to modular programming, static and dynamic binding, and the use of service programs in the Integrated Language Environment (ILE). Students are also introduced to coding using IBM’s CODE/400, a client-server pc-based application development environment. Other topics include Operations Navigator, a Graphical User Interface (GUI), used to create, change, and maintain iSeries/400 objects and traditional iSeries/400 application development tools such as Source Entry Utility (SEU), Screen Design Aid (SDA), and Data File Utility (DFU). The emphasis is on the creation of interactive programs versus batch programs. Advanced topics include the use of subfiles for interactive programs and an introduction to SQL’s Data Definition Language (DDL) and Data Manipulation Language (DML). Programming is done both on a stand-alone pc-compatible workstation and on an iSeries midrange computer.
Transfer Credit: CSU

CIS 223
VISUALAGE RPG PROGRAMMING 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 175 or equivalent with a grade of Pass or "C" or higher.
This is a second course in the use of the RPG programming language. Students are introduced to modular programming in procedural and event-driven programs. They are also introduced to 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 224
ADVANCED COBOL PROGRAMMING 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: CIS 176 or equivalent with a grade of Pass or "C" or higher.
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

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Second, third, and fourth semester students must be completed on the job/training site. Second that relate to their major and job skills must self-evaluation to determine individual job per week. Students also pursue a program of their instructors for a minimum of one hour per week. 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 SCIENCE OCCUPATIONAL WORK EXPERIENCE**

**4.0 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 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
CIS 280
OBJECT-ORIENTED PROGRAMMING C++ 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Strongly recommend CIS 180 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: CIS 180 or CIS 182 or equivalent with a grade of Pass or "C" or higher.
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: 3.0 Lecture/2.0 Laboratory
Recommendation: Strongly recommend CIS 182 or equivalent with a grade of Pass 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: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 125 or CIS 182 or equivalent with a grade of Pass 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: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 180 and CIS 205 or equivalent with grades of Pass or "C" or higher.
This course covers the Common Gateway Interface (CGI) and Perl programming. Students learn how CGI works and how to write 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: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 171 or equivalent with a grade of Pass 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: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 186 and CIS 205 or equivalent with a grade of Pass 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 3.5 UNITS
Class hours: 3.0 Lecture
Prerequisite: CIS 182 or CIS 280 or equivalent with a grade of Pass or "C" or higher or appropriate work experience.
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, and advanced applications.
Transfer Credit: CSU; UC

CIS 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department.

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COS 1L (Not Degree Applicable)

**COSMETOLOGY SKILLS DEVELOPMENT LAB** 0.5 UNIT

Class hours: 1.7 Laboratory
Prerequisite: COS 50C, COS 54, COS 60B, COS 70A, or COS 71A with a grade of Pass or "C" or higher.
Corequisite: Concurrent enrollment in any Cosmetology course
This lab 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, haircoloring, permanent waving, chemical straightening, scalp treatments, facials, waxing, manicuring, pedicures and thermal styling.

COS 25 (Not Degree Applicable)

**INTRODUCTION TO COSMETOLOGY CAREERS** 2.0 UNITS

Class hours: 2.0 Lecture/1.0 Laboratory
Recommendation: READ 42 or ENGL 15 with a grade of Pass or "C" or higher, or the equivalent.
This is an introductory course providing an overview of cosmetology careers as a cosmetologist, esthetician, or manicurist. 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.

COS 50A

**INTRODUCTORY COSMETOLOGY I** 6.5 UNITS

Class hours: 3.3 Lecture/9.8 Laboratory
Recommendation: SAT satisfactory completion of the English Placement Process or ENGL 20 with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Pass 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 is designed to acquaint students with and to develop their ability to perform the basic skills in hairstyling, hairsculpting, permanent waving, and hair color. Emphasis will be placed on the Bureau of Barbering and Cosmetology Rules and Regulations, and the Cosmetology Act, as well as health, safety, sanitation, anatomy, and chemistry as they relate to the cosmetology profession.

COS 50B

**INTRODUCTORY COSMETOLOGY II** 6.5 UNITS

Class hours: 3.3 Lecture/9.8 Laboratory
Prerequisite: COS 50A or equivalent with a grade of Pass 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 is designed to acquaint the students with and to develop their ability to perform the basic skills in haircoloring, permanent waving, skin care, manicuring and pedicuring. Emphasis will be placed on the Cosmetology Act, State Board Rules and Regulations, as well as health, safety, sanitation, anatomy, and chemistry as they relate to the cosmetology profession.

COS 50C

**INTRODUCTORY COSMETOLOGY III** 6.5 UNITS

Class hours: 3.3 Lecture/9.8 Laboratory
Prerequisite: COS 50B or equivalent with a grade of Pass 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 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.

COS 51A

**INTERMEDIATE COSMETOLOGY I** 6.5 UNITS

Class hours: 3.3 Lecture/9.8 Laboratory
Prerequisite: COS 50C, COS 60B, COS 70A, or COS 71B with a grade of Pass or "C" or higher.
This is an intermediate course in theory as it pertains to cosmetology. Students continue to develop manipulative skills in makeup, electric facials, facial waxing, arching, haircoloring, hair lighteners, color weaves, chemical restructuring, soft perm and conditioning to gain knowledge of trichology, anatomy, skin care, nail care, chemistry, health and safety as they relate to cosmetology. Emphasis is placed on professionalism and client relationships.

COS 51B

**INTERMEDIATE COSMETOLOGY II** 6.5 UNITS

Class hours: 3.3 Lecture/9.8 Laboratory
Prerequisite: COS 51A or equivalent with a grade of Pass or "C" or higher.
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 trichology and chemistry, as they relate to cosmetology. Emphasis is placed on professionalism and client relationships.

COS 51C

**INTERMEDIATE COSMETOLOGY III** 6.5 UNITS

Class hours: 3.3 Lecture/9.8 Laboratory
Prerequisite: COS 51B or equivalent with a grade of Pass or "C" or higher.
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: 3.3 Lecture/9.8 Laboratory
Prerequisite: COS 51C or COS 61B, or COS 70B or COS 72B with a grade of Pass or "C" or higher.
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: 3.3 Lecture/9.8 Laboratory
Prerequisite: COS 52A or equivalent with a grade of Pass or "C" or higher.
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: 3.3 Lecture/9.8 Laboratory
Prerequisite: COS 52B or equivalent with a grade of Pass or "C" or higher.
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.

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All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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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: 3.3 Lecture/9.8 Laboratory  
Prerequisite: COS 52C or COS 62B or 70C or COS 73B with a grade of Pass 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**  
**10.0 UNITS**
Class hours: 5.0 Lecture/15.0 Laboratory  
Prerequisite: Limitation on enrollment: Completion of 10th grade or equivalent.  
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**  
**10.0 UNITS**
Class hours: 5.0 Lecture/15.0 Laboratory  
Prerequisite: COS 54 or equivalent with a grade of Pass or "C" or higher.  
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 60A**
**INTRODUCTORY**  
**COSMETOLOGY I**  
**10.0 UNITS**
Class hours: 5.0 Lecture/15.0 Laboratory  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 20 with a grade of Pass or "C" or higher.  
This is an introductory course in 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, hair sculpturing, 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**  
**10.0 UNITS**
Class hours: 5.0 Lecture/15.0 Laboratory  
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, hair sculpturing, 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**  
**10.0 UNITS**
Class hours: 5.0 Lecture/15.0 Laboratory  
Prerequisite: COS 51C or COS 61B or COS 73A with a grade of Pass 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 haircoloring, thermal hairstyling, competition styling, hair sculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation.

**COS 61B**
**INTERMEDIATE**  
**COSMETOLOGY II**  
**10.0 UNITS**
Class hours: 5.0 Lecture/15.0 Laboratory  
Prerequisite: COS 61A or COS 72A with a grade of Pass 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 people skills, manipulative skills in haircolor, manicuring, scalp treatments, chemical waving, hair sculpturing, and chemistry, hair design, permanent wave, press and curl, and chemical relaxing. Emphasis is placed on professionalism, client relationships, and people skills.

**COS 62A**
**ADVANCED**  
**COSMETOLOGY I**  
**10.0 UNITS**
Class hours: 5.0 Lecture/15.0 Laboratory  
Prerequisite: COS 51C or COS 61B or COS 70B or COS 72B with a grade of Pass 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, hair sculpturing, 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**  
**10.0 UNITS**
Class hours: 5.0 Lecture/15.0 Laboratory  
Prerequisite: COS 62A or COS 73A with a grade of Pass 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, hair sculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation.

**COS 63**
**ADVANCED COSMETOLOGY MANIPULATION**  
**5.0 UNITS**
Class hours: 2.5 Lecture/7.5 Laboratory  
Prerequisite: COS 62B or COS 70C or COS 73B with a grade of Pass of "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, haircoloring, permanent waving, chemical straightening, scalp treatments, facials, waxing, manicuring, pedicuring, and thermal styling. This course may be taken for a maximum of 2 times as necessary to complete 1600 hours.

**COS 70A**
**INTRODUCTORY**
**COSMETOLOGY** 8.0 UNITS
Class hours: 4.2 Lecture/12.5 Laboratory
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Pass 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 is designed to acquaint the student with and to develop their ability to perform the basic skills in hairstyling, hairsculpturing, haircoloring, permanent waving, manicuring, and facials. Emphasis will be placed on the Cosmetology Act, State Board Rules and Regulations, safety, sanitation, anatomy, and chemistry as it relates to the cosmetology industry.

**COS 70B**
**INTERMEDIATE**
**COSMETOLOGY** 8.0 UNITS
Class hours: 4.2 Lecture/12.5 Laboratory
Prerequisite: COS 50C or COS 60B or COS 70A or COS 71B with a grade of Pass 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 develop manipulative skills in hair coloring, thermal hairstyling, chemical waving, chemical straightening, permanent waving, manicuring, and facials. Emphasis will be placed on professionalism and personal/client relationships.

**COS 70C**
**ADVANCED COSMETOLOGY**
**MANIPULATION** 8.0 UNITS
Class hours: 4.2 Lecture/12.5 Laboratory
Prerequisite: COS 51C or COS 61B or COS 70B or COS 72B with a grade of Pass 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, manicuring. Emphasis is placed on professionalism and personal/client relationships.

**COS 71B**
**INTERDUCTORY**
**COSMETOLOGY II** 4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: COS 60A or COS 71A with a grade of Pass 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 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 72A**
**INTERMEDIATE**
**COSMETOLOGY I** 4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: COS 50C or COS 60B or COS 70A or COS 71B with a grade of Pass 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 continue developing manipulative skills in hairstyling, haircoloring, permanent waving, manicuring, and pedicuring. Emphasis will be placed on professionalism and personal/client relationships. (Formerly COS 71B)

**COS 72B**
**INTERMEDIATE**
**COSMETOLOGY II** 4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: COS 61A or COS 72A with a grade of Pass or "C" or higher.

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, 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** 4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: COS 51C or COS 61B or COS 70B or COS 72B with a grade of Pass 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 for a maximum of 2 times as necessary to complete 1600 hours.

**COS 73B**
**ADVANCED COSMETOLOGY II** 4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: COS 62A or COS 73A with a grade of Pass or "C" or higher.

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** 10.0 UNITS
Class hours: 5.0 Lecture/15.0 Laboratory
Prerequisite: A valid Cosmetology license and five years verified work experience. This course is the first of two sequenced courses
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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 COS II  10.0 UNITS
Class hours: 5.0 Lecture/15.0 Laboratory
Prerequisite: COS 80A or equivalent with a grade of Pass or "C" or higher.
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.

COS 98
DIRECTED STUDIES  1.0 UNIT
Class hours: 3.0 Independent Study
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.

COS 99
DIRECTED STUDIES  2.0 UNITS
Class hours: 6.0 Independent Study
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.

COUNSELING AND GUIDANCE
(Counseling & Guidance Division)

CG 1 (Not Degree Applicable)
CAREER PLANNING  1.0 UNIT
Class hours: 1.0 Lecture
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 EDUCATION READINESS  2.0 UNITS
Class hours: 2.0 Lecture/3.3 Laboratory
This course is designed to aid the student in identifying and evaluating individual, educational, and vocational ability. Self-awareness techniques will be used to enhance this assessment process. This class is designed primarily for the EOPS summer students, but is open to all interested students. Field work experience will assist the student to develop skills that enhance his/her work performance. (Ten hours field work for those employed as work study or equivalent volunteer experience as approved by instructor. This course may be taken for a maximum of 2 times.

CG 3 (Not Degree Applicable)
ORIENTATION FOR THE STUDENT WITH DISABILITIES  1.0 UNIT
Class hours: 1.0 Lecture
This course is designed to orient the disabled student to the varied programs and services offered by Cerritos College. An IEP/learning contract will be developed for each student who enrolls in this course. Emphasis is on assisting the disabled student to successfully integrate into all aspects of the college.

CG 4 (Not Degree Applicable)
CAREER EXPLORATION FOR THE STUDENT WITH DISABILITIES  1.0 UNIT
Class hours: 1.0 Lecture
This course is designed to assist the disabled student in the process of developing goals for future employment. An Individual Educational Plan (IEP)/learning contract will be developed for each student who enrolls in this course. Emphasis is upon exploring career choices, assessment of interests, and the development of employment seeking skills.

CG 5 (Not Degree Applicable)
PERSONAL ASSESSMENT FOR THE STUDENT WITH DISABILITIES  1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: CG 3 or equivalent with a grade of Pass or "C" or higher
This course is designed to assist the student with disabilities to develop personal assessment techniques. The course will present concepts and methods of self-evaluation and personal action including goal setting, time management, making choices, achieving objectives, and self advocacy.

CG 6 (Not Degree Applicable)
FAMILY LIVING FOR THE STUDENT WITH DISABILITIES  1.0 UNIT
Class hours: 1.0 Lecture
This class is designed to explore the various aspects of family life from the viewpoint of the disabled person. An Individual Educational Plan (IEP)/learning contract will be developed for each student who enrolls in this course. Sexuality, marriage and parenting will be addressed. This course may be taken for a maximum of 4 times.

CG 100
COUNSELOR AIDE IN THE COMMUNITY COLLEGE  2.0 UNITS
Class hours: 2.0 Lecture
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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
CG 150 (Not Degree Applicable)
DYNAMICS OF LEADERSHIP  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher 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  3.0 UNITS
Class hours: 3.0 Lecture
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  1.0 UNIT
Class hours: 1.0 Lecture/0.5 Laboratory
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 for a maximum of 2 times.
Transfer Credit: CSU

CG 220
TRANSITION TO UNIVERSITIES  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement process or ENGL 52 or equivalent with a grade of Pass 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 admission standards; review of major preparations; 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

CG 298
DIRECTED STUDIES  1.0 UNIT
Class hours: 3.0 Independent Study
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

CG 299
DIRECTED STUDIES  2.0 UNITS
Class hours: 6.0 Independent Study
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

COURT REPORTING & CAPTIONING CAREERS
(Business Division)

CRCC 9A (Not Degree Applicable)
BEGINNING PROCAT SOFTWARE  1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
This course will give court reporters and court reporting students an introduction to the use of ProCAT court reporting computer-aided transcription (CAT) software. Students will learn how to use this software in the CAT process of producing transcripts and writing realtime. This course is for students just beginning to use ProCAT software. This course may be taken a maximum of 4 times. (Formerly BUSC 9A)

CRCC 9B (Not Degree Applicable)
INTERMEDIATE PROCAT SOFTWARE  1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
This course will give court reporters and court reporting students who are already using the basic functions of ProCAT software for court reporting computer-aided transcription (CAT) an introduction to some of the more advanced function capabilities of the software. This course may be taken a maximum of 4 times. (Formerly BUSC 9B)

CRCC 10A (Not Degree Applicable)
BEGINNING CASE CATALYST  1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
This course will give court reporters and court reporting students an introduction to the use of Case CAlyst court reporting computer-aided transcription (CAT) software. Students will learn how to use this software in the CAT process of producing transcripts and writing realtime. This course is for students who are just beginning to use Case CAlyst software. This course may be taken a maximum of 4 times. (Formerly BUSC 10A)

CRCC 10B (Not Degree Applicable)
INTERMEDIATE CASE CATALYST SOFTWARE  1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
This course will give court reporters and court reporting students who are already using the basic functions of Case CAlyst software for court reporting computer-aided transcription (CAT) an introduction to some of the more advanced function capabilities of the software. This course may be taken a maximum of 4 times. (Formerly BUSC 10B)

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
CRCC 11 (Not Degree Applicable)
HAND CARE FOR
COURT REPORTERS 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
This course is designed to provide a variety of useful tools for maintaining hand care health for court reporting and captioning student who constantly use their hands in repetitive motion. Students will learn more about important aspects of hand care, including ergonomics, exercises, stretching, massage, as well as receiving instruction on how to find hand care therapists and products that can be used to reduce hand and arm tension and fatigue. (Formerly BUSC 11)

CRCC 50
COMPUTER-AIDED PROOFREADING 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Recommendation: CRCC 57A, CRCC 142, and CRCC 192 or equivalent with grades of Pass 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 for a maximum of 2 times. (Formerly BUSC 50)

CRCC 57A
BEGINNING AURAL LANGUAGE SKILLS FOR
COURT REPORTERS 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CRCC 140, CRCC 141, and BCOM 46 or equivalent with grades of Pass 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. (Formerly BUSC 57A)

CRCC 57B
ADVANCED AURAL LANGUAGE
SKILL FOR COURT REPORTERS 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: BCOM 46, CRCC 57A, CRCC 140, and CRCC 141 or equivalent with grades of Pass 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. (Formerly BUSC 57B)

CRCC 98
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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. (Formerly BUSC 98)

CRCC 99
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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. (Formerly BUSC 99)

CRCC 114
MEDICAL TERMINOLOGY FOR
MACHINE SHORTHAND 3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CRCC 142 or equivalent with a grade of Pass 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. (Formerly BUSC 114)
Transfer Credit: CSU

CRCC 115
MEDICAL SHORTHAND FOR
COURT REPORTERS 4.0 UNITS
Class hours: 4.0 Lecture/1.0 Laboratory
Recommendation: CRCC 114, CRCC 143 or equivalent with grades of Pass 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. (Formerly BUSC 115)
Transfer Credit: CSU

CRCC 116
INTRODUCTION TO
COURTROOM PROCEDURES 4.0 UNITS
Class hours: 4.0 Lecture/2.0 Laboratory
Recommendation: CRCC 119C, CRCC 144 and CRCC 192 or equivalent with grades of Pass 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. (Formerly BUSC 116)
Transfer Credit: CSU

CRCC 118
DEPOSITION PROCEDURES,
CODES AND ETHICS 4.0 UNITS
Class hours: 4.0 Lecture/2.0 Laboratory
Recommendation: CRCC 144 or equivalent with a grade of Pass 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. (Formerly BUSC 118)
Transfer Credit: CSU

**CRCC 119A**
**BEGINNING COMPUTER-AIDED TRANSCRIPTION**  3.0 UNITS
Class hours: 2.0 Lecture/3.5 Laboratory
Recommendation: CRCC141, CRCC142 or equivalent with grades of Pass 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 for a maximum of 3 times. (Formerly BUSC 119A)
Transfer Credit: CSU

**CRCC 119B**
**INTERMEDIATE COMPUTER-AIDED TRANSCRIPTION**  3.0 UNITS
Class hours: 2.0 Lecture/3.5 Laboratory
Recommendation: CRCC 119A and CRCC 143 or equivalent with grades of Pass or "C" or higher.
This CAT course includes scoping, 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 for a maximum of 3 times. (Formerly BUSC 119B)
Transfer Credit: CSU

**CRCC 119C**
**ADVANCED COMPUTER-AIDED TRANSCRIPTION**  3.0 UNITS
Class hours: 2.0 Lecture/3.5 Laboratory
Recommendation: CRCC119B, CRCC 144 or equivalent with grades of Pass or "C" or higher.
This advanced CAT course integrates taking verbatim proceedings with the Prowriter attachment or an electronic stenotype machine, sending the notes to the computer, then scoping, editing, printing, and electronically filing the final document. This course may be taken for a maximum of 3 times. (Formerly BUSC 119C)
Transfer Credit: CSU

**CRCC 119D**
**BASIC CONCEPTS OF REALTIME**  3.0 UNITS
Class hours: 2.0 Lecture/3.5 Laboratory
Recommendation: CRCC119 C or equivalent with a grade of Pass 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 techniques, developing a consistent 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 for a maximum of 3 times. (Formerly BUSC 119D)
Transfer Credit: CSU

**CRCC 119E**
**COMPUTER-AIDED MEDICAL DICTIONARY BUILD**  3.0 UNITS
Class hours: 2.0 Lecture/3.5 Laboratory
Recommendation: CRCC114 and CRCC 119B or equivalent with grades of Pass or "C" or higher.
This course is for students proficient in computerized machine shorthand writing skills and who are interested in a stenographic computer-aided medical transcribing career. It provides a systematic approach toward building a basic personal medical dictionary. The dictionary entries include Latin and Greek prefixes, roots, suffixes and combining forms as well as medical terminology that will be created using a computer-aided transcription (CAT) software system. This course may be taken for a maximum of 3 times. (Formerly BUSC 119E)
Transfer Credit: CSU

**CRCC 119F**
**COMPUTER-AIDED LEGAL DICTIONARY BUILD**  3.0 UNITS
Class hours: 2.0 Lecture/3.5 Laboratory
Recommendation: CRCC 119B or equivalent with a grade of Pass 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 for a maximum of 3 times. (Formerly BUSC 119F)
Transfer Credit: CSU

**CRCC 119G**
**COMPUTER-AIDED TRANSCRIPTION FOR SCOPISTS**  3.0 UNITS
Class hours: 2.0 Lecture/2.6 Laboratory
Recommendation: CRCC 9A and CRCC 9B, or CRCC 10A and CRCC 10B, CRCC 119B, CRCC 140C or equivalent with grades of Pass or "C" or higher.
This course is designed for the student who wants to be a scopist for court reporters. It covers computer-aided transcription of a variety of judicial type proceedings utilizing specialized court reporting software. The student does not need to be a court reporting stenotype machine user but should already have completed a basic course in the software used to transcribe stenotype notes. This course may be taken a maximum of 2 times.

**CRCC 125**
**COMPUTERIZED SHORTHAND REALTIME PRACTICUM I** (100-130 WPM)  4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: CRCC 119C, CRCC 119D and CRCC 143 or equivalent with grades of Pass or "C" or higher.
This course continues intensive sustained dictation to improve realtime writing and computer transcription ability. Latin and French words, Congressional Record, multiplex voice testimony, legal opinions, and expert opinion materials in realtime are included. This course may be taken for a maximum of 2 times. (Formerly BUSC 125)
Transfer Credit: CSU

**CRCC 126**
**COMPUTERIZED SHORTHAND REALTIME PRACTICUM II** (120-150 WPM)  4.5 UNITS
Class hours: 2.0 Lecture/2.6 Laboratory
Recommendation: CRCC 119C, CRCC 119D and CRCC 144 or equivalent with grades of Pass or "C" or higher.
This course continues intensive sustained dictation to improve realtime writing and computer transcription ability. Latin and French words, Congressional Record, multiplex voice testimony, Final Argument, Opening Statement and Conference at the Bench broaden keying vocabulary. This course may be taken for a maximum of 3 times. (Formerly BUSC 126)
Transfer Credit: CSU

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CRCC 127
COMPUTERIZED SHORTHAND
REALTIME PRACTICUM III
(140-170 WPM)  4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: CRCC 119C, CRCC 119D and CRCC 145 or equivalent with grades of Pass 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 for a maximum of 3 times. (Formerly BUSC 127)
Transfer Credit: CSU

CRCC 128
COMPUTERIZED SHORTHAND
REALTIME PRACTICUM IV
(160-190 WPM)  5.0 UNITS
Class hours: 2.0 Lecture/10.0 Laboratory
Recommendation: CRCC 119C, CRCC 119D and CRCC 146 or equivalent with grades of Pass 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. In addition, this course prepares advanced students for various state and city hearing reporter examinations and employment. This course may be taken for a maximum of 4 times. (Formerly BUSC 128)
Transfer Credit: CSU

CRCC 129
COMPUTERIZED SHORTHAND
REALTIME PRACTICUM V
(180-210 WPM)  5.0 UNITS
Class hours: 2.0 Lecture/10.0 Laboratory
Recommendation: CRCC 119C, CRCC 119D and CRCC 147 or equivalent with grades of Pass 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 for a maximum of 4 times. (Formerly BUSC 129)
Transfer Credit: CSU

CRCC 130
COMPUTERIZED SHORTHAND
REALTIME PRACTICUM VI
(190-225 WPM)  4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: CRCC 119C, CRCC 119D and CRCC 148 or equivalent with grades of Pass 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 for a maximum of 4 times. (Formerly BUSC 130)
Transfer Credit: CSU

CRCC 138
HOW TO SUCCEED IN COURT REPORTING SCHOOL  1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: CRCC 140 and CRCC 141, or CRCC 140A and CRCC 140B, or CRCC 141A or CRCC 141B or equivalent with grades of Pass or "C" or higher.
This course is designed to teach court reporting students to create and follow their own plan for success in completing their court reporter training. Students will be provided with proven effective practices and ongoing motivational materials to consider and adopt so students will have a better opportunity to learn to motivate themselves through the challenging studies and practice required to succeed at their goals.

CRCC 139
EXPLORING CAREER OPPORTUNITIES IN COURT REPORTING  1.0 UNIT
Class hours: 1.0 Lecture
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 for a maximum of 2 times. (Formerly BUSC 139)
Transfer Credit: CSU

CRCC 140A
COMPUTERIZED SHORTHAND THEORY  2.0 UNITS
Class hours: 1.0 Lecture/4.0 Laboratory
Corequisite: CRCC 141
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. (Formerly BUSC 140A)
Transfer Credit: CSU

CRCC 140B
COMPUTERIZED SHORTHAND THEORY FOR SCOPISTS  2.0 UNITS
Class hours: 1.0 Lecture/4.0 Laboratory
Corequisite: CRCC 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. (Formerly BUSC 140B)
Transfer Credit: CSU

CRCC 140C
COMPUTERIZED SHORTHAND THEORY REVIEW/SKILL DEVELOPMENT  4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Corequisite: CRCC 141C
Recommendation: BCOM 46 or equivalent with a grade of Pass or "C" or higher and a minimum typing speed of 35 wpm or enrollment in a typing class.
This first-semester course covers the basic theory of computer-compatible shorthand for students who are interested in becoming scopists for court reporters. There is no hands-on use of the stenotype machine. Therefore, a machine is not required. Students will learn that theory and learn to read and transcribe the notes of the court reporter.

CRCC 141
COMPUTERIZED SHORTHAND THEORY REVIEW/SKILL DEVELOPMENT  4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Corequisite: CRCC 141
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 for a maximum of 2 times. (Formerly BUSC 141)
Transfer Credit: CSU

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CRCC 141A
COMPUTERIZED SHORTHAND
THEORY REVIEW/SKILL
DEVELOPMENT A   2.0 UNITS
Class hours: 1.0 Lecture/4.0 Laboratory
Recommendation: May be taken concurrently with CRCC 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 for a maximum of 2 times. (Formerly BUSC 143A)
Transfer Credit: CSU

CRCC 141B
COMPUTERIZED SHORTHAND
THEORY REVIEW/SKILL
DEVELOPMENT B   2.0 UNITS
Class hours: 1.0 Lecture/4.0 Laboratory
Recommendation: May be taken concurrently with CRCC 140B. Minimum typing speed of 35 wpm or enrollment in a typing class.
This course is an intensive review of the second 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 for a maximum of 2 times. (Formerly BUSC 143B)
Transfer Credit: CSU

CRCC 142
INTERMEDIATE COMPUTERIZED
SHORTHAND   4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: CRCC 119A, CRCC 140 or equivalent with grades of Pass or "C" or higher.
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 for a maximum of 2 times. (Formerly BUSC 142)
Transfer Credit: CSU

CRCC 143
COMPUTERIZED SHORTHAND
SPEED BUILDING I   4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: CRCC 119B or equivalent with a grade of Pass or "C" or higher. May be taken concurrently with CRCC 142 and CRCC 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 for a maximum of 2 times. (Formerly BUSC 143)
Transfer Credit: CSU

CRCC 144
COMPUTERIZED SHORTHAND
SPEED BUILDING II   4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: CRCC 119C with a grade of Pass or "C" or higher. May be taken concurrently with CRCC 143 and CRCC 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 for a maximum of 2 times. (Formerly BUSC 144)
Transfer Credit: CSU

CRCC 145
COMPUTERIZED SHORTHAND
SPEED BUILDING III   4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: CRCC 119D with a grade of Pass or "C" or higher. May be taken concurrently with CRCC 144 and CRCC 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 for a maximum of 3 times. (Formerly BUSC 145)
Transfer Credit: CSU

CRCC 146
COMPUTERIZED SHORTHAND
SPEED BUILDING (140-170 WPM)   4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: CRCC 145 or equivalent with a grade of Pass or "C" or higher. May be taken concurrently with CRCC 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 for a maximum of 3 times. (Formerly BUSC 146)
Transfer Credit: CSU

CRCC 147
COMPUTERIZED SHORTHAND
SPEED BUILDING (160-190 WPM)   4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: CRCC 185 with a grade of Pass or "C" or higher. May be taken concurrently with CRCC 146 and CRCC 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 the Certified Shorthand Reporters and the National Court Reporters examinations. This course may be taken for a maximum of 4 times. (Formerly BUSC 147)
Transfer Credit: CSU

CRCC 148
COMPUTERIZED SHORTHAND
SPEED BUILDING (180-210 WPM)   5.0 UNITS
Class hours: 2.0 Lecture/10.0 Laboratory
Recommendation: CRCC 185 with a grade of Pass or "C" or higher. May be taken concurrently with CRCC 147 and CRCC 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 for a maximum of 4 times. (Formerly BUSC 148)
Transfer Credit: CSU

CRCC 149
COMPUTERIZED SHORTHAND
SPEED BUILDING (190-225 WPM)   5.0 UNITS
Class hours: 2.0 Lecture/10.0 Laboratory
Recommendation: CRCC 185 or equivalent with a grade of Pass or "C" or higher. May be taken concurrently with CRCC 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 for a maximum of 4 times. (Formerly BUSC 149)
Transfer Credit: CSU
CRCC 152  
INTRODUCTION TO JURY CHARGE INTERMEDIATE  
COMPUTERIZED SHORTHAND  4.5 UNITS  
Class hours: 2.0 Lecture/8.0 Laboratory  
Recommendation: CRCC 140 and CRCC 141 or equivalent with grades of Pass 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 for a maximum of 2 times. (Formerly BUSC 152)  
Transfer Credit: CSU

CRCC 153  
MULTIPLE-VOICE COLLOQUIY I  
COMPUTERIZED SHORTHAND  4.5 UNITS  
SPEED BUILDING I  4.5 UNITS  
Class hours: 2.0 Lecture/8.0 Laboratory  
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 for a maximum of 2 times. (Formerly BUSC 153)  
Transfer Credit: CSU

CRCC 154  
INTRODUCTION TO CONGRESSIONAL RECORD COMPUTERIZED SHORTHAND  
SPEED BUILDING II  4.5 UNITS  
Class hours: 2.0 Lecture/8.0 Laboratory  
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 for a maximum of 2 times. (Formerly BUSC 154)  
Transfer Credit: CSU

CRCC 155  
MULTIPLE-VOICE COLLOQUIY II  
COMPUTERIZED SHORTHAND  
SPEED BUILDING III  4.5 UNITS  
Class hours: 2.0 Lecture/8.0 Laboratory  
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 for a maximum of 3 times. (Formerly BUSC 155)  
Transfer Credit: CSU

CRCC 156  
JURY VOIR Dire PROCEDURES  
COMPUTERIZED SHORTHAND  
SPEED BUILDING (140-170 WPM)  4.5 UNITS  
Class hours: 2.0 Lecture/8.0 Laboratory  
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 for a maximum of 3 times. (Formerly BUSC 156)  
Transfer Credit: CSU

CRCC 157  
CONGRESSIONAL TESTIMONY  
COMPUTERIZED SHORTHAND  
SPEED BUILDING (160-190 WPM)  4.5 UNITS  
Class hours: 2.0 Lecture/8.0 Laboratory  
Recommendation: Minimum stenotype speed of 150 wpm and minimum typing speed of 60 wpm.  
This short-term, intensive course promotes the development of speed and accuracy in taking dictation at the machine.  
Sustained dictation consists of Congressional Record, literary, jury charge, and multiple-voice testimony.  
This course also prepares advanced students for various state and city hearing reporter examinations.  
This course may be taken for a total of 3 times. (Formerly BUSC 157)  
Transfer Credit: CSU

CRCC 158  
PROFESSIONAL PRACTICES  
HEARINGS/CONFERENCES  
COMPUTERIZED SHORTHAND  
SPEED DEVELOPMENT (180-210 WPM)  5.0 UNITS  
Class hours: 2.0 Lecture/10.0 Laboratory  
Recommendation: Minimum stenotype speed of 170 wpm and minimum typing speed of 60 wpm.  
This short-term intensive course is designed to introduce methodology of reporting hearings and conferences with multiple-speaker identification symbols and to develop management techniques and stenotype speed for this aspect of reporting.  
This course provides for the development of proficiency in writing multiple-voice dictation with an emphasis on hearings and conferences at speeds ranging from 180-210 wpm.  
This course may be taken for a maximum of 3 times. (Formerly BUSC 158)  
Transfer Credit: CSU

CRCC 159  
IN CURIA/IN CAMERA PROCEDURES  
COMPUTERIZED SHORTHAND  
SPEED DEVELOPMENT (190-225 WPM)  5.0 UNITS  
Class hours: 2.0 Lecture/10.0 Laboratory  
Recommendation: Minimum stenotype speed of 180 wpm, minimum typing speed of 60 wpm and completion of 60 hours of apprenticeship training.  
This course offers an overall view of the mechanics of trials and applications of court procedures.  
Students are assisted in acquiring a mastery of creating verbatim records.  
In addition, the course offers sustained dictation on all aspects of criminal and civil trials to develop professionalism.  
This course may be taken for a maximum of 3 times. (Formerly BUSC 159)  
Transfer Credit: CSU

CRCC 173  
COURT REPORTING AND CAPTIONING CAREERS  
OCCUPATIONAL WORK EXPERIENCE  3.0 UNITS  
Class hours: 1 hour/week coordination class  
Corequisite: Enrollment in 7 or more units, including Court Reporting and Captioning Careers Occupational Work Experience.  
Three units of Court Reporting and Captioning Careers Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester.  
Four units of Court Reporting and Captioning Careers 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. 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. These courses may be taken for a maximum of 4 times. (Formerly BUSC 173) Transfer Credit: CSU

CRCC 174
COURT REPORTING AND CAPTIONING CAREERS OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS
Class hours: 1 lecture
Corequisite: Enrollment in 7 or more units, including Court Reporting and Captioning Careers Occupational Work Experience. Three units of Court Reporting and Captioning Careers Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Court Reporting and Captioning Careers 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. 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. These courses may be taken for a maximum of 4 times. (Formerly BUSC 174) Transfer Credit: CSU

CRCC 180
COMPUTERIZED SHORTHAND SPEED BUILDING (225 WPM) 4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: Strongly recommend completion of CSR academic requirements and Court Reporting CAT computer classes. Minimum stenotype speed of 190 wpm and typing speed of 60 wpm.
This course is designed for potential Certified Shorthand Reporter Examination candidates and Registered Professional Reporter Examination candidates. It will provide intensive sustained dictation at 225-240 wpm to develop speed and endurance on the steno machine. This course may be taken for a maximum of 4 times. (Formerly BUSC 180) Transfer Credit: CSU

CRCC 181
COMPUTERIZED SHORTHAND SPEED BUILDING (240 WPM) 4.5 UNITS
Class hours: 2.0 Lecture/8.0 Laboratory
Recommendation: Minimum stenotype speed of 225 wpm and typing speed of 60 wpm. Strongly recommend completion of CSR academic requirements and Court Reporting CAT computer classes.
This course is designed for candidates for the Certified Shorthand Reporter examination, the Registered Professional Reporter examination, and the Registered Merit Reporter examination. It will provide intensive, sustained dictation at 240-260 wpm to develop speed, accuracy, and endurance on the steno machine. (Formerly BUSC 181) Transfer Credit: CSU

CRCC 185
CSR/RPR EXAMINATION PREPARATION 1.5 UNITS
Class hours: 1.5 Lecture
Recommendation: Strongly recommend completion of Certified Shorthand Reporter’s academic requirements.
This course is designed for potential Certified Shorthand Reporter Examination candidates and Registered Professional Reporter Examination candidates. It will provide academic preparation and reinforcement in selected subject areas. This course may be taken for a maximum of 3 times. (Formerly BUSC 185) Transfer Credit: CSU

CRCC 192
TRANSCRIPTION PROCEDURES 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Recommendation: CRCC 141 or equivalent with a grade of Pass or “C” or higher and the ability of type 40 wpm.
This course is designed for potential Certified Shorthand Reporter Examination candidates and Registered Professional Reporter Examination candidates. It will provide academic preparation and reinforcement in selected subject areas. This course may be taken for a maximum of 3 times. (Formerly BUSC 192) Transfer Credit: CSU

CRCC 193A
BASIC CAPTIONING 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Recommendation: CRCC 119B and CRCC 144 or equivalent with grades of Pass or “C” or higher.
This course is designed to teach students the basics of realtime captioning as applied to broadcast captioning; captioning of video and other media; captioning for hearing impaired at public gatherings, meetings, and in the classroom; and captioning over the Internet. This course will cover the basic concepts of captioning for students interested in exploring a career in captioning. This course may be taken a maximum of 2 times. (Formerly BUSC 193A) Transfer Credit: CSU

CRCC 193B
BASIC BROADCAST CAPTIONING 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Recommendation: CRCC 119B, CRCC 144 and CRCC 193A or equivalent with a grade of Pass or “C” or higher.
This course is designed to be a basic course in broadcast captioning, also known in the industry as closed-captioning using court reporting skills. This course will cover the basic theoretical concepts of broadcast captioning for students interested in exploring a career in the broadcast captioning field. This course may be taken a maximum of 2 times.

CULINARY ARTS (Health Occupations Division)

CA 15 (Not Degree Applicable)
CERTIFICATION FOR FOOD HANDLER 0.5 UNIT
Class hours: 0.5 Lecture
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 (Not Degree Applicable)

OCcupational Work Experience 3.0 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.

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 are 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 44 (Not Degree Applicable)

Occupational Work Experience 4.0 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.

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 are 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

Introduction to Commercial Food Production 6.0 UNITS

Class hours: 4.0 Lecture/6.0 Laboratory

Corequisite: CA 101 with a grade of Pass or "C" or higher or prior completion.

This course introduces the beginning student to the ingredients, methods, and skills in commercial food production. The content will include history, nutrition, equipment, knife skills, ingredients, stocks and sauces, breakfast cookery, cold garde manger, and basic yeast bread production. 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: 3.0 Lecture/20.0 Laboratory

Prerequisite: CA 52 and CA 101 or equivalent with grades of Pass 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: 3.0 Lecture/20.0 Laboratory

Prerequisite: CA 53 or equivalent with a grade of Pass 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 55

Introduction to Baking Skills 4.0 UNITS

Class hours: 2.0 Lecture/6.0 Laboratory

Corequisite: CA 101 with a grade of Pass 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 58

Professional Baking and Pastry Production I 5.0 UNITS

Class hours: 3.0 Lecture/7.0 Laboratory

Prerequisite: CA 80 and CA 101 or equivalent with grades of Pass 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. Demonstration 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 59

Professional Baking and Pastry Production II 5.0 UNITS

Class hours: 3.0 Lecture/7.0 Laboratory

Prerequisite: CA 81 or equivalent with a grade of Pass or "C" or higher.

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 60

Foods Purchase and Control 3.0 UNITS

Class hours: 3.0 Lecture

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 61

Professional Baking and Pastry Production III 5.0 UNITS

Class hours: 3.0 Lecture/7.0 Laboratory

Prerequisite: CA 82 or equivalent with a grade of Pass 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. Demonstration 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 65 (Not Degree Applicable)

Food Costing 2.0 UNITS

Class hours: 2.0 Lecture

This course emphasizes the use of food costing to control expenses for a food service establishment. This course will cover various costing systems, menu item pricing, and inventory maintenance. This course may be taken a maximum of 3 times.

CA 66 (Not Degree Applicable)

Food Quality Assurance 1.0 UNIT

Class hours: 1.0 Lecture

This course introduces the student to the basic principles of food quality assurance in a food service establishment. The course content will include food safety, sanitation, and health regulations. A negative T.B. test for food service personnel is a State regulation.

CA 68

Directed Studies 1.0 UNIT

Class hours: 3.0 Independent Study

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.

CA 98

Directed Studies 2.0 UNITS

Class hours: 6.0 Independent Study

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.

CA 101
INTRODUCTION TO FOOD SERVICE, SAFETY, AND SANITATION 1.0 UNIT
Class hours: 1.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
This course is an overview of the hospitality industry and its various segments. Course content will include history, organizations, trends, and job opportunities.
Transfer Credit: CSU

DANCE
(Health, Physical Education Division)

DANC 50 (Not Degree Applicable)
INDIVIDUALIZED DANCE DEVELOPMENT 1.0 UNIT
Class hours: 3.8 Laboratory
This course is designed to provide students the individualized opportunity to acquire and practice the dance skills necessary for participation in dance concerts, local and regional dance festivals and choreography competitions. (Formerly PE 3, PE 50)

DANC 100
DANCE APPRECIATION 3.0 UNITS
Class hours: 3.0 Lecture
This course offers study styles, artists, and the cultural/historical characteristics of dance as an art form and social expression. Topics for study will include current events, and popular trends. Materials are presented through lectures, video examples, class discussion, and attendance at live dance concerts. (Formerly PE 179)
Transfer Credit: CSU; UC

DANC 101
HISTORY OF DANCE 3.0 UNITS
Class hours: 3.0 Lecture
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. (Formerly PE 191)
Transfer Credit: CSU; UC

DANC 105
INTRODUCTION TO DANCE MOVEMENT 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
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 for a maximum of 4 times. (Formerly PE 180)
Transfer Credit: CSU; UC

DANC 106A
BEGINNING BALLET 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Students will study basic technical skills as well as conditioning the body by building muscle strength. (Formerly PE 186A)
Transfer Credit: CSU; UC

DANC 106B
INTERMEDIATE BALLET 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Students will study more advanced technical skills as well as conditioning the body by building muscle strength. (Formerly PE 186B)
Transfer Credit: CSU; UC

DANC 107
BALLET VARIATIONS 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course is designed to continue the development of technical ballet skills with emphasis on developing physical and artistic expression through the execution of classical and contemporary variations. This course may be taken for a maximum of 4 times. (Formerly PE 194)
Transfer Credit: CSU; UC

DANC 108A
DANCE, MODERN, BEGINNING 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Students will study the expressive body movements in a creative art form. Emphasis will be on developing modern dance skills and technique as well as conditioning the body by improving posture, flexibility, strength, and coordination. This course may be taken for a maximum of 2 times. (Formerly PE 182A)
Transfer Credit: CSU; UC

DANC 108B
DANCE, MODERN, INTERMEDIATE 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Students will study intermediate level modern and jazz dance and utilize basic movement and music principles to choreograph dance sequences. This course may be taken for a maximum of 2 times. (Formerly PE 182B)
Transfer Credit: CSU; UC

DANC 109
INTRODUCTION TO DANCE CULTURES OF THE WORLD 2.0 UNITS
Class hours: 4.0 Laboratory
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 for a maximum of 4 times. (Formerly PE 181)
Transfer Credit: CSU; UC

DANC 110
COMMERCIAL DANCE 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course is designed to emphasize movement for commercial dance work used in film, concert dance, television and other shows and commercials. It offers instruction in current trends of popular dance. This course may be taken for a maximum of 4 times. (Formerly PE 195)
Transfer Credit: CSU; UC

DANC 120
PARTNERING FOR DANCE 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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.
another. This course may be taken for a maximum of 2 times. (Formerly PE 185)
Transfer Credit: CSU; UC

DANC 121
LATIN SOCIAL DANCE    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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. (Formerly PE 196)
Transfer Credit: CSU; UC

DANC 122
MIDDLE EASTERN DANCE    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
The course will introduce students to the history of Middle Eastern dance in its different forms and styles. The evolution of the dance form from its traditional styles to a fusion of Eastern and Western dance styles is also presented. This course may be taken a maximum of 4 times. (Formerly PE 199)
Transfer Credit: CSU; UC

DANC 123
AFRICAN DANCE    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course introduces students to selected dances of Africa through the practice of steps and choreography. Music and history of the dances studied with their social and religious significance in African culture are presented. Emphasis is placed on coordination of polyrhythmic body movements with the music. This course may be taken a maximum of 4 times. (Formerly PE 198)
Transfer Credit: CSU; UC

DANC 124
HIP HOP DANCE    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course covers the various forms of beginning hip hop dance, including a basic history of hip hop dancing and the aligned movement vocabulary, terminology, and social/ theatrical codifications. This course may be taken a maximum of 4 times. (Formerly PE 197)
Transfer Credit: CSU; UC

DANC 125
INTRODUCTION TO BALLROOM DANCE    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 for a maximum of 4 times. (Formerly PE 193)
Transfer Credit: CSU; UC

DANC 130
CHOREOGRAPHY    2.0 UNITS
Class hours: 4.0 Laboratory
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 for a maximum of 2 times. (Formerly PE 184)
Transfer Credit: CSU; UC

DANC 131
DANCE NOTATION    3.0 UNITS
Class hours: 3.0 Lecture
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. (Formerly PE 190)
Transfer Credit: CSU; UC

DANC 132
DANCE AND DIGITAL TECHNOLOGY    3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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. (Formerly PE 192)
Transfer Credit: CSU

DANC 133
DANCE PRODUCTION    2.0 UNITS
Class hours: 4.0 Laboratory
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 for a maximum of 4 times. (Formerly PE 183)
Transfer Credit: CSU; UC

DANC 134
DANCE PERFORMANCE    2.0 UNITS
Class hours: 4.0 Laboratory
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 for a maximum of 4 times. (Formerly PE 188)
Transfer Credit: CSU; UC

DANC 135
DANCE WORKSHOP    2.0 UNITS
Class hours: 4.0 Laboratory
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 for a maximum of 4 times. (Formerly PE 189)
Transfer Credit: CSU; UC

DANC 136
DANCE REPERTORY    2.0 UNITS
Class hours: 4.0 Laboratory
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 for a maximum of 4 times. (Formerly PE 187)
Transfer Credit: CSU; UC

DANC 140
BEGINNING JAZZ DANCE    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course is an introduction to jazz techniques and dance styles. Emphasis is on mastering the fundamental skills basic to jazz dance techniques and artistic performance. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

DANC 141
INTERMEDIATE JAZZ DANCE    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: TH 140 or DANC 140 or equivalent with a grade of Pass or "C" or higher. This course is a continuation of the development of jazz dance techniques and style begun in TH 140 or DANC 140. Emphasis is on mastery of more complicated jazz dance combination

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
DANC 142
BEGINNING TAP
DANCE
Class hours: 1.0 Lecture/3.0 Laboratory
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 2 times.
Transfer Credit: CSU; UC

DANC 143
INTERMEDIATE TAP
DANCE
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: TH 142 or DANC 142 or equivalent with a grade of Pass or "C" or higher.
This course is a continuation of the development of tap dance techniques and style begun in TH 142 or DANC 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 2 times.
Transfer Credit: CSU

DANC 144
DANCE FOR MUSICAL THEATRE
Class hours: 1.0 Lecture/3.0 Laboratory
This course is an introduction to musical theatre dance styles, techniques and repertory. Emphasis is on mastering the fundamental skills and styles basic to musical theatre dance technique and performance. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

DENTAL ASSISTING
(Health Occupations Division)

DA 1 (Not Degree Applicable)
DENTAL RADIOGRAPHY SAFETY LICENSE
Class hours: 1.3 Lecture/1.7 Laboratory
Prerequisite: Verification of a minimum of 480 hours of work experience as a dental assistant.
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 for a maximum of 2 times. This course is offered on a credit/no credit basis only.

DA 51
APPLIED DENTAL SCIENCE I
DENTAL RADIOGRAPHY I
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: DA 52 or equivalent with a grade of Pass or "C" or higher.
This course is a study of the dental x-ray, the characteristics and methods of controlling x-ray, techniques of dental radiography with emphasis placed on equipment, composition and preparation of solutions, procedures for processing films, and mounting films. The student will practice on the manikin exposing films using radiation protection and safety guidelines.
Transfer Credit: CSU

DA 52
DENTAL RADIOGRAPHY I
Class hours: 1.0 Lecture/3.0 Laboratory
Corequisite: DA 53
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.
Transfer Credit: UC

DA 53
INTRODUCTION TO CHAIRSIDE ASSISTING
Class hours: 2.0 Lecture/3.0 Laboratory
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.
Transfer Credit: UC

DA 54
INTRODUCTION TO OPERATORY PROCEDURES
Class hours: 2.0 Lecture/6.0 Laboratory
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.
Transfer Credit: UC

DA 61
APPLIED DENTAL SCIENCE II
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: DA 51 or equivalent with a grade of Pass or "C" or higher.
Corequisite: DA 63
This course includes a study of oral pathology, nitrous oxide, pharmacology and medical emergencies in the dental office. Students will develop and implement a community dental health project. In addition, emphasis will be placed on preventive dentistry, which includes the use of fluorides, effective oral hygiene, nutritional guidelines, and development of a plaque control program. Instruction, clinical experience, and evaluation of both coronal polishing and application of pit and fissure sealants on teeth will be included.

DA 62
DENTAL RADIOGRAPHY II
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: DA 52 or equivalent with a grade of Pass 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.
Transfer Credit: UC

DA 63
ADVANCED CHAIRSIDE ASSISTING
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: DA 53 and DA 54 or equivalent with grades of Pass 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** 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: DA 51 or equivalent with a grade of Pass or "C" or higher.
This 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.

**DA 65**
**CLINICAL I DENTAL SCHOOLS** 3.0 UNITS
Class hours: 1.0 Lecture/7.0 Laboratory
Prerequisite: DA 53, DA 54 or equivalent with grades of Pass or "C" or higher.
Corequisite: DA 61, 62, and 63.
This course includes the practice of dealing with patients and working with dental students in four-handed dental procedures. The clinical instruction in this course is conducted at dental schools. Emphasis is placed on general operative dentistry, endodontics, and treating emergency patients. Weekly seminars are devoted to the evaluation of the clinical experience which includes techniques, patients' special needs, and communicating with patients and staff.

**DA 75**
**CLINICAL II COOPERATIVE OFFICE TRAINING** 5.0 UNITS
Class hours: 1.1 Lecture/10.7 Laboratory
Prerequisite: DA 65 or equivalent with a grade of Pass or "C" or higher.
This course includes the practice of working as a member of the dental team in community dental offices under the direct supervision of dentists. Emphasis is placed on general practice procedures, specialty areas, and the clinical application of intraoral tasks assigned to the registered dental assistant. Proficiency of all skills in the use of equipment is emphasized. The students will develop a professional attitude in all phases of dental assisting, including legal and ethical aspects of dental practice. Weekly seminars are held to evaluate and review clinical applications. Preparation for the certification and Registered Dental Assistant examinations will be included.

**DENTAL HYGIENE**
*(Health Occupations Division)*

**DH 110**
**PREVENTIVE DENTISTRY I** 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: Admission to the Dental Hygiene Program.
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.
*Transfer Credit: CSU*

**DH 111**
**INFECTION CONTROL AND DENTAL OFFICE EMERGENCIES** 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: Admission to the Dental Hygiene Program.
Corequisite: DH 115C
This course covers the basic principles of infection control and the application of "standard 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-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** 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: Admission to the Dental Hygiene Program.
This course is a study of 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, and digital radiography with laboratory experience and analysis of technical errors.
*Transfer Credit: CSU*

**DH 114**
**DENTAL HYGIENE CLINICAL SCIENCE I** 2.0 UNITS
Class hours: 2.0 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** 2.0 UNITS
Class hours: 6.0 Laboratory
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** 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
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** 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: Admission to the Dental Hygiene Program.
Corequisite: DH 115C and DH 116
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*

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DH 120
PREVENTIVE DENTISTRY II  2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: DH 114 and H0 152 or equivalent with grades of Pass or "C" or higher.
Corequisite: DH 125C.
Recommendation: DH 110 or equivalent with a grade of Pass 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  2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: DH 114 and DH 115C or equivalent with grades of Pass or "C" or higher.
Corequisite: DH 125C.
This course is designed to support Clinical Dental Hygiene II. It is intended 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  3.0 UNITS
Class hours: 9.0 Laboratory
Prerequisite: DH 115C or equivalent with grades of Pass or "C" or higher.
Corequisite: DH 125C.
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 various dental specialties.
Transfer Credit: CSU

DH 126
GENERAL AND ORAL PATHOLOGY  2.0 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
Prerequisite: DH 112, DH 116, and DH 119 or equivalent with grades of Pass 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  2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: DH 115C, DH 116, and DH 119 or equivalent with grades of Pass 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  2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: DH 116 with a grade of Pass or "C" or higher.
Corequisite: DH 125 and DH 127.
This course is designed to teach the student 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 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  2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: DH 114 or equivalent with grades of Pass or "C" or higher.
Corequisite: DH 125C.
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 curettage and root planing are emphasized.
Transfer Credit: CSU

DH 150C
CLINICAL DENTAL HYGIENE IIA  1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: DH 125C & DH 128 or equivalent with grades of Pass 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  1.0 UNIT
Class hours: 3.0 Laboratory
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  2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: DH 125C and DH 127 or equivalent with grades of Pass 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  2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: DH 125C or equivalent with grades of Pass 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  4.0 UNITS
Class hours: 12.0 Laboratory
Prerequisite: DH 125C or equivalent with grades of Pass or "C" or higher.
Corequisite: DH 235.
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 OUTREACH I** 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: DH 110 or equivalent with a grade of Pass 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 the elementary school-aged child. The principles learned will be applied in the delivery of dental health education to elementary school children in the community. In addition, a basic framework for table clinic development will be presented, and support will be given to students in the planning process of this activity.

**Transfer Credit: CSU**

**DH 239**
**INTRODUCTION TO DENTAL BIOSTATISTICS AND RESEARCH** 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: Admission to the Dental Hygiene Program.
This course provides an introduction to research methodology and biostatistics. Emphasis will be placed on the reading and interpreting of scientific literature in dentistry and dental hygiene and using technology in searching for appropriate research to complete applicable assignments.

**Transfer Credit: CSU**

**DH 244**
**ETHICAL ISSUES IN DENTAL HYGIENE** 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: DH 235C or equivalent with a grade of Pass 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** 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: DH 235C or equivalent with a grade of Pass 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** 4.0 UNITS
Class hours: 12.0 Laboratory
Prerequisite: DH 235C or equivalent with a grade of Pass 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 multiculturally 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 246**
**COMMUNITY OUTREACH II** 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: DH 238 or equivalent with a grade of Pass or "C" or higher.
This course provides a basic introduction to the principles of adult education. Opportunities are provided to deliver dental health education to a variety of age groups and special needs individuals in the community. Emphasis will be on student knowledge and initiative in the design, implementation, and evaluation of a dental health program for an adult group in the community. Additionally, table clinics on a current topic of interest will be presented in the community. (Formerly DH 248L)

**Transfer Credit: CSU**

**DH 248**
**PRINCIPLES OF COMMUNITY ORAL HEALTH** 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: Admission to the Dental Hygiene Program
This course introduces basic concepts of dental public health including career opportunities for the dental hygienist, community health assessment, oral health status and trends, and health care delivery and financing. Emphasis will be placed on public health issues and related research.

**Transfer Credit: CSU**

**DH 298**
**DIRECTED STUDIES** 1.0 UNIT
Class hours: 3.0 Independent Study
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**

**DH 299**
**DIRECTED STUDIES** 2.0 UNITS
Class hours: 6.0 Independent Study
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**

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ESCI 101
PHYSICAL ECOLOGY 3.0 UNITS
Class hours: 2.5 Lecture/1.5 Laboratory
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Pass or "C" or 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 102
PHYSICAL ECOLOGY
FIELD LABORATORY 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: Concurrent enrollment in ESCI 101 or prior completion of ESCI 101 or equivalent with a grade of Pass 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. (Formerly ESCI 101L)
Transfer Credit: CSU; UC

ESCI 104
OCEANOGRAPHY 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Pass or "C" or higher.
This course consists of an introduction to the geography of the oceans, geology of ocean basins, and the chemistry and physics of sea water. The ecology of the sea and its effect on ecosystem 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 104L
OCEANOGRAPHY LABORATORY 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: ESCI 104 or equivalent with a grade of Pass or "C" or higher, or concurrent enrollment.
This laboratory/study course is designed to supplement Earth Science 104. Emphasis will be placed on the interrelationships between the geological, chemical, physical, and biological aspects of the marine environment. In addition, human use and abuse of the coastal zone and marine environment will be analyzed.
Transfer Credit: CSU; UC

ESCI 106
WEATHER AND CLIMATE 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Pass 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 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Recommendation: ENGL 100 clearance and MATH 40 or equivalent with a grade of Pass 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 areas of anthropology, astronomy, geology, geography, 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 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: A college course in the earth sciences with a grade of Pass 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 for a maximum of 2 times.
Transfer Credit: CSU

ESCI 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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.
Transfer Credit: CSU

ESCI 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

ECON 101
ECONOMIC ISSUES AND POLICY 3.0 UNITS
Class hours: 3.0 Lecture
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 to 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
WOMEN IN GLOBAL ECONOMY 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: ENGL 100 or equivalent with a grade of Pass or "C" or higher.
This course is an introduction to the global economy from the perspectives of women in developing countries. 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 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.
Transfer Credit: CSU; UC

ECON 201 (CAN ECON 2)
PRINCIPLES OF MACROECONOMICS 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: MATH 40 or equivalent with a grade of Pass or "C" or higher or satisfactory completion of the Math Placement Process. Recommendation: ENGL 100 or equivalent with a grade of Pass 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 (CAN ECON 4)
PRINCIPLES OF MICROECONOMICS 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: MATH 40 or equivalent with a grade of Pass or "C" or higher or satisfactory completion of the Math Placement Process. Recommendation: ENGL 100 or equivalent with a grade of Pass 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 principle of economic choice and opportunity costs are emphasized.
Transfer Credit: CSU; UC

ECON 204
MONEY, ETHICS, AND ECONOMIC JUSTICE 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of English Placement Process or ENGL 52 or equivalent with a grade of Pass 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

ECON 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

ECON 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

EDUCATION/ELEMENTARY SCHOOL TEACHERS
(Humanities, Social Science Division)

EDEL 100
INTRODUCTION TO TEACHING AND LEARNING IN DIVERSE CONTEMPORARY CLASSROOM 1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: Enrollment in the Cerritos College Teacher Training Academy (Teacher TRAC) or CSULB’s Integrated Teacher Education Program (ITEP).
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) 1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: Enrollment in the Cerritos College Teacher Training Academy.
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 observation in a middle/high school is a required component of this course.
Transfer Credit: CSU

EDEL 200
INTRODUCTION TO EDUCATION 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Enrollment in the Cerritos College Teacher Training Academy (Teacher TRAC) or CSULB’s Integrated Teacher Education Program (ITEP), and completion of EDEL 100 or equivalent with a grade of Pass 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

EDEL 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

EDUCATIONAL TECHNOLOGY
Tech Training and Distance Education

EDT 19
FUNDAMENTALS OF TELECONFERENCING 1.0 UNIT
Class hours: 1.0 Lecture
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 for a maximum of 4 times.

EDT 20
TELECONFERENCING FOR SMALL GROUPS 2.0 UNITS
Class hours: 2.0 Lecture
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 for a maximum of 2 times.

EDT 21
TELECONFERENCE TELEMATICS 1.0 UNIT
Class hours: 1.0 Lecture
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 for a maximum of 4 times.

EDT 22
TELECONFERENCE REVIEW AND EVALUATION 1.0 UNIT
Class hours: 1.0 Lecture
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 for a maximum of 4 times.

EDT 23
TELECONFERENCE PRODUCTION 3.0 UNITS
Class hours: 3.0 Lecture
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 for a maximum of 3 times.

EDT 24
TELECONFERENCE PORTFOLIO 3.0 UNITS
Class hours: 3.0 Lecture
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 for a maximum of 3 times.

EDT 30
FUNDAMENTALS OF INSTRUCTION MULTI-MEDIA PRODUCTION 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
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-media production equipment, computer software applications, and other resources to support educators and educational programs. This course may be taken for a maximum of 2 times.

EDT 43
EDUCATIONAL OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: 1 lecture
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 1.0 UNIT
Class hours: 1.0 Lecture
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.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
EDT 51
EMAIL FOR EDUCATORS 1.0 UNIT
Class hours: 1.0 Lecture
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 1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: EDT 50 or EDT 51 or equivalent with a grade of Pass 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 1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: EDT 50 or EDT 51 or equivalent with a grade of Pass 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 EDUCATION 1.0 UNIT
Class hours: 1.0 Lecture
This course is intended to teach educators the skills and capabilities of integrated software packages such as Claris Works, Apple Works, and Microsoft Works. These are all popular software products used in the K-12 learning environment. Topics include word processing, desktop publishing and presentations, spreadsheets, and databases. Students will produce a variety of documents useful in the K-12 classroom. This course may be taken for a maximum of 2 times.

EDT 66
POWERPOINT FOR FUTURE TEACHERS 1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: EDT 50 or EDT 51, EDT 52 or EDT 53, and EDT 110 or equivalent with grades of Pass 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 68
USING KIDPIX 1.0 UNIT
Class hours: 1.0 Lecture
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 for a maximum of 4 times.

EDT 70
EXCEL FOR FUTURE TEACHERS 1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: EDT 50 or EDT 51, EDT 52 or EDT 53, and EDT 110 or equivalent with grades of Pass 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 2.0 UNITS
Class hours: 2.0 Lecture
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 for a maximum of 2 times.

EDT 98
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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.

EDT 100
INTEGRATION OF THE INTERNET INTO CURRICULUM 2.0 UNITS
Class hours: 2.0 Lecture
Guidance: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Pass 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 community will be provided where educators collaborate to improve their skills in creating effective learning resources using suitable technologies.

Transfer Credit: CSU
# Announcement of Courses

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All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
EDT 110
INTRODUCTION TO EDUCATIONAL TECHNOLOGY 2.0 UNITS
Class hours: 2.0 Lecture/0.1 Laboratory
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 1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Pass or “C” or higher.
This course is intended to teach educators how to create co-ordinated 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 114
MICROSOFT PRODUCER FOR EDUCATORS 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: EDT or EDT 51 and EDT 52 or EDT 53 and EDT 105 or equivalent with grades of Pass or “C” or higher.
This course covers the concepts and techniques for using Microsoft Producer. Students will learn to use Microsoft Producer while discovering practical and creative uses of the application to enhance existing and new PowerPoint presentations in teaching. Methods of integrating this software into the educational setting will be explored.
Transfer Credit: CSU

EDT 115
TECHNOLOGY INTEGRATION IN EDUCATION 1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: EDT 50 OR EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Pass 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 1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Pass or “C” or higher.
This course is for educators and prospective educators actively involved in the use, purchase and/or maintenance of computer hardware and software in the educational setting. Students will learn the functions of pertinent hardware, how to interface equipment to the computer, system requirements, and evaluation techniques. Students will learn to troubleshoot basic hardware, software, printing, and network problems. Maintaining appropriate maintenance and troubleshooting logs will be addressed. Technology plans and effective classroom management techniques using technology in a limited number of educational settings discussed.
Transfer Credit: CSU

EDT 120
EXPLORE ASSISTIVE TECHNOLOGY IN EDUCATION 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Pass or “C” or higher.
This course is intended to develop the sensitivity, skills and knowledge needed by teachers and others in the field of education to create an educational environment that is conducive to learning for students with disabilities. It will also be helpful for those who may have other learning challenges such as English second language learners. Students will investigate strategies for differentiating instruction for students with learning and other disabilities and challenges within the general educational environment. Through lecture and hands-on experience, participants will explore practical uses of software that can be applied to classroom learning materials to make those materials more accessible to students needing assistance.
Transfer Credit: CSU

EDT 121
USING HANDHELD COMPUTERS IN EDUCATION 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Pass 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 2.0 UNITS
Class hours: 2.0 Lecture
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,
This course covers the concepts and techniques for video editing using Apple's iMovie and/or Microsoft Movie Maker in education. Using these free movie editing software packages, students will learn to bring lessons to life by creating video "reports" to demonstrate abstract concepts through narration, video, music, and pictures. Methods of integrating these software programs into new and existing lesson plans will be explored.

Transfer Credit: CSU

EDT 138
TEACHING WITH CLAY ANIMATION 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Pass or "C" or higher.
This course covers the concepts and techniques for creating animation using clay characters to enhance storytelling, creative writing, and visualization of mathematical and scientific concepts. Building upon the theories of multiple intelligences in learning, clay animation enhances student learning through a variety of methods.
Transfer Credit: CSU

EDT 150
PODCASTING IN EDUCATION 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with grades of Pass or "C" or higher.
This course covers the concepts and techniques for creating web-based broadcasting, called podcasts, for educational purposes and making them available on the Internet. Podcasting is a way to post and distribute electronic media files online. Podcasting content, resources, hardware and software requirements, and procedures will be covered in addition to methods of integrating podcasts into educational course content.
Transfer Credit: CSU

EDT 170
MOODLE COURSE MANAGEMENT SYSTEM 2.0 UNITS
Class hours: 2.0 Lecture
This course covers the use of Moodle, a free, open source course management system. A course management system is software that helps to create an effective Internet-based learning environment using pedagogical principles. It also supports collaboration among students, faculty, administrators, and the community and can be used as a repository of materials.
Transfer Credit: CSU

Announcement of Courses
EL 66  FUNDAMENTALS OF ELECTRICITY  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: EL 100 and TM 50 or equivalent with grades of Pass or "C" or higher.
This course introduces the student to the principles of electrical power. Topics to be discussed include electrical safety, generators, motors, wiring, National Electrical Code (NEC), installation, and maintenance.

Transfer Credit: CSU

EL 110L  DC ELECTRONICS LABORATORY  1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: EL 200 or equivalent with a grade of Credit or "C" or higher, or concurrent enrollment.
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 120  PRINCIPLES OF AC ELECTRONICS  4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: EL 110 or equivalent with a grade of Pass or "C" or higher.
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 120L  AC ELECTRONICS LABORATORY  1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: EL 110L or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.
Corequisite: Concurrent enrollment or completion of EL 120 with a grade of Credit or "C" or higher.
Experiments performed in this course are planned to accompany the lectures in EL 120 (Principles of AC Electronics). The student learns to use electronic laboratory instruments in the measurement and analysis of AC circuits.

Transfer Credit: CSU

EL 134  DIGITAL CIRCUIT AND COMPUTER LOGIC  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: EL 100 or equivalent with a grade of Pass or "C" or higher.
Corequisite: EL 134L
Recommendation: EL 60.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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. This course may be taken a maximum of 4 times.

EL 50  ELECTRONIC TESTS AND MEASUREMENTS  1.5 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
Recommendation: EL 100 or equivalent with a grade of Pass or "C" or higher.
This course is 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 taken a maximum of 2 times.

EL 56  PROGRAMMABLE LOGIC CONTROLLERS  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: EL 100 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This course introduces students 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 60  COMPUTER AIDED CIRCUIT ANALYSIS  1.5 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
Prerequisite: EL 100 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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 100  BASIC ELECTRONICS  4.0 UNITS
Class hours: 4.0 Lecture
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. This 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  4.0 UNITS
Class hours: 4.0 Lecture
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
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 that include 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 1.0 UNIT**

Class hours: 3.0 Laboratory  
Prerequisite: EL 134 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.

Recommendation: TM 50, EL 60 and EL 100.  
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, FPGAs, and 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 3.0 UNITS**

Class hours: 3.0 Lecture  
Prerequisite: EL 120 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.

Recommendation: EL 100 or equivalent with a grade of Pass or "C" or higher.  
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**

**SEMI-CONDUCTOR ELECTRONICS LABORATORY 1.0 UNIT**

Class hours: 3.0 Laboratory  
Prerequisite: EL 120L or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.

Corequisite: Concurrent enrollment or completion of EL 200 or equivalent with a grade of Pass or "C" or higher.  
Recommendation: EL 50, EL 60.

Experiments planned to accompany the lectures in EL 200 covering semiconductor diodes, transistors and transistor amplifiers are included in this course.

*Transfer Credit: CSU*

**EL 298**

**DIRECTED STUDIES 1.0 UNIT**

Class hours: 3.0 Independent Study  
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*

**EL 299**

**DIRECTED STUDIES 2.0 UNITS**

Class hours: 6.0 Independent Study  
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*

**ENGY 298**

**DIRECTED STUDIES 1.0 UNIT**

Class hours: 3.0 Independent Study  
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*

**ENGY 299**

**DIRECTED STUDIES 2.0 UNITS**

Class hours: 6.0 Independent Study  
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*

**ENGY 110**

**ENERGY AND THE WAY WE LIVE 3.0 UNITS**

Class hours: 3.0 Lecture  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Pass or "C" or higher.  
This introductory course describes the importance of energy in natural systems, energy resources, and 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*
ENGR 123
DESCRIPTIVE GEOMETRY 3.0 UNITS

Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: MATH 140 or TM 50 and ENGT 153 or equivalent with grades of Pass 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 3.0 UNITS

Class hours: 3.0 Lecture
Prerequisite: PHYS 202 or equivalent with a grade of Pass 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 3.0 UNITS

Class hours: 3.0 Lecture
Prerequisite: MATH 170 and PHYS 101 or PHYS 201 or equivalent with grades of Pass 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

ENGR 116
BLUEPRINT READING FOR MACHINE TRADES 2.0 UNITS

Class hours: 1.5 Lecture/1.5 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher or appropriate work experience.

This course familiarizes 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 117
GEOMETRICAL DIMENSIONING AND TOLERANCING 2.0 UNITS

Class hours: 2.0 Lecture
Prerequisite: ENGT 138 or equivalent with a grade of Pass 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
DESIGN FUNDAMENTALS INCLUDING AUTOCAD 3.0 UNITS

Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher or appropriate work experience.

This course assists students in the advanced applications of Computer Aided Design. They will utilize the AutoCAD system for customization, symbol libraries, menu development, and general applications in their particular fields.

Transfer Credit: CSU

ENGT 153
MACHINE DESIGN WITH AUTOCAD 3.0 UNITS

Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher or appropriate work experience.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ENGT 160
AUTODESK MAP 3-D    4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher
This course introduces students to AutoDesk Map 3-D software, which delivers all of the power, fluency, and connectivity of AutoCAD software. Content will include analysis and productivity tools to create, maintain, and produce maps in a precise graphical environment. Students will use AutoDesk Map 3-D software to enhance productivity of comprehensive automated mapping tools built in it for engineers, planners, utility managers and anyone who creates and maintains maps.
Transfer Credit: CSU

ENGT 237
GRAPHICAL STATICS AND STRENGTH OF MATERIALS    3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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 255
AUTODESK VIZ RENDERING AND SOLID MODELING APPLICATIONS    4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
Recommendation: ENGT 153 or equivalent.
This course will assist students in creating advanced applications of solid modeling and applying shading and rendering techniques utilizing AutoDesk VIZ system for basic theory as well as applications to their particular fields.
Transfer Credit: CSU

ENGT 256
INTRODUCTION TO AUTODESK MECHANICAL DESKTOP    4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher or appropriate work experience.
Recommendation: MTT 100 and MFGT 100 or equivalent with grades of Pass or "C" or higher.
This course assists students in creating three-dimensional parametric part modeling, assembly modeling, and surface modeling designs. Students receive instruction utilizing the most recent release of AutoCAD interfacing with AutoDesk Mechanical Desktop.
Transfer Credit: CSU

ENGT 257
AUTODESK INVENTOR    4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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

ENGT 258
DESIGN AND PRODUCTION TECHNOLOGY WITH AUTOCAD    4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This course is a study of modern techniques of design using AutoCAD software. Instruction includes the production, operation and process materials selection for AutoCAD plan. Planning, scheduling and cost performance are used to implement design solutions.
Transfer Credit: CSU

ENGT 259
SOLIDWORKS    4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This course assists students in creating three-dimensional (3-D) parametric part modeling, assembly modeling, surface modeling, and bills of materials. Students receive instruction utilizing the most recent release of SolidWorks software.
Transfer Credit: CSU

ENGT 265
CATIA I    4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This course focuses on the CATIA CAD/CAM system highlighting system structure and 3-D geometry creation and manipulation. Based on wire frame profiles created on sketch planes, 3-D parametric solid models are produced. Also covered is the use of parts for assembly modeling, creation of working drawings, and bills of material for the engineering design industry.
Transfer Credit: CSU

ENGT 266
CATIA II    4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 265 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This course deals with advanced applications of the latest release of CATIA, such as generative sheet metal design, assembly analysis, generative stress analysis, design and creation of complex parts and assemblies, and surface modeling and lofting for computer-aided engineering (CAE) functions.
Transfer Credit: CSU

ENGT 298
DIRECTED STUDIES    1.0 UNIT
Class hours: 3.0 Independent Study
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
ENGL 299
DIRECTED STUDIES  2.0 UNITS
Class hours: 6.0 Independent Study
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

ENGLISH
(Liberal Arts Division)

ENGL 15 (Not Degree Applicable)
BEGINNING WRITING FOR NATIVE ENGLISH SPEAKERS  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: Satisfactory Completion of the English Placement Process. This beginning course is designed for native English speakers already able to understand and speak the language. It is intended to reduce beginning writing students' fear and anxiety about writing. This course may be taken a maximum of 2 times.

ENGL 20 (Not Degree Applicable)
BASIC WRITING  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 15 or ESL 200 or equivalent with a grade of Pass 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 concentrates on short essay writing in accord with the conventions of standard English.

ENGL 22 (Not Degree Applicable)
SPELLING BASICS  1.0 UNIT
Class hours: 1.0 Lecture
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  1.0 UNIT
Class hours: 1.0 Lecture
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  1.0 UNIT
Class hours: 1.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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: 1.5 Laboratory
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  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ENGL 50A or equivalent with a grade of Pass or "C" or higher.
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  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Pass 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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 reporters’ examination.

ENGL 100 (CAN ENGL 2)
FRESHMAN COMPOSITION  4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher.
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; UC

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ENGL 102 (CAN ENGL 4)
FRESHMAN COMPOSITION
AND LITERATURE  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ENGL 100 or equivalent with a grade of Pass 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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher or a satisfactory
completion of the Advanced Placement English Examination of the College Entrance
Examination Board.  
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

ENGL 106
INTRODUCTION TO
LINGUISTICS  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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  2.0 UNITS
Class hours: 2.0 Lecture
This course is designed to further an under-
standing 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  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the
English Placement Process or ENGL 52 or
equivalent with a grade of Pass 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 201
TUTORING WRITING  2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: ENGL 100 or equivalent with a grade
of Pass or "C" or higher.
This course provides essential training and
experience for students who aspire to tutor
writing, teach English or basic writing skills,
or improve their own writing.  Students learn
the fundamentals of assisting peers with
writing tasks.  This course includes a lab
component during which the student will get
firsthand experience with tutoring students
about writing.
Transfer Credit: CSU

ENGL 221B
LITERATURE IN THE BIBLE:
CHRISTIAN SCRIPTURES  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the
English Placement Process or ENGL 52 or
equivalent with a grade of Pass 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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the
English Placement Process or ENGL 52 or
equivalent with a grade of Pass or "C" or higher.
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/CHICANO
LITERATURE  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the
English Placement Process or ENGL 52 or
equivalent with a grade of Pass or "C" or higher.
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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the
English Placement Process or ENGL 52 or
equivalent with a grade of Pass or "C" or higher.
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

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259
ENGL 225 MEXICAN LITERATURE IN TRANSLATION 3.0 UNITS
Class hours: 3.0 Lecture
A one-semester course to survey Mexican literature in translation. The genres included will be the novel, the short story, drama, poetry, autobiography, essays, and oral performance. Modern and contemporary authors will be highlighted.
Transfer Credit: CSU; UC

ENGL 226 AFRICAN-AMERICAN LITERATURE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
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, drama, poetry, autobiography, essays, and oral performance. Modern and contemporary authors will be highlighted.
Transfer Credit: CSU; UC

ENGL 227 CURRENT LITERATURE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This course is a study of literature currently important or currently popular and not ordinarily studied in the regular departmental curriculum. Specific topics, such as best sellers, science fiction, campus classics, California literature, Native American literature, or modern literature, will be announced in the schedule of classes. It may be repeated with different topics for a maximum of 6 units.
Transfer Credit: CSU; UC

ENGL 228 SHAKESPEARE'S PLAYS 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This course will advance composition skills 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 14) (CAN ENGL SEQ C) INTRODUCTION TO AMERICAN LITERATURE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 16) (CAN ENGL SEQ C) INTRODUCTION TO AMERICAN LITERATURE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 231 READINGS IN POETRY 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 232 READINGS IN SHORT FICTION 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 233 READINGS IN THE DRAMA 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 234 READINGS IN WOMEN'S LITERATURE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This course studies the works of female writers from the ancient to the present, highlighting the distinctive elements of women's literature, the special role of autobiography. It will consider the special concerns of women's writings 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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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  (CAN ENGL 6)
CREATIVE WRITING  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 for a maximum of 2 times.
Transfer Credit: CSU; UC

ENGL 241
SCREENWRITING  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 for a maximum of 2 times.
Transfer Credit: CSU; UC

ENGL 245
WORLD MYTHOLOGY AS LITERATURE  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
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 as literary expression.
Transfer Credit: CSU; UC

ENGL 246A  (CAN ENGL 8)
SURVEY OF ENGLISH LITERATURE  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher.
This course studies English literature from the Anglo-Saxon period to the Romantic Movement. Emphasis is on the various themes, forms, and trends in English literature, and how they prefigured Romanticism and later movements.
Transfer Credit: CSU; UC

ENGL 246B  (CAN ENGL 10)
SURVEY OF ENGLISH LITERATURE  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher.
This course studies English literature from the Romantic Movement to the present day. It emphasizes the various themes, forms and trends in English literature.
Transfer Credit: CSU; UC

ENGL 248A
MASTERPIECES OF WORLD LITERATURE  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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

ENGL 248B
MASTERPIECES OF WORLD LITERATURE  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This course studies Western and world literature from the 17th century to the 20th century. Various themes, forms and trends are studied in an effort to examine the universal problems of mankind.
Transfer Credit: CSU; UC

ENGL 298
DIRECTED STUDIES  1.0 UNIT
Class hours: 3.0 Independent Study
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

ENGL 299
DIRECTED STUDIES  2.0 UNITS
Class hours: 6.0 Independent Study
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

ENGLISH AS A SECOND LANGUAGE
(Liberal Arts Division)

ESL 1 (Not Degree Applicable)
ENGLISH AS A SECOND LANGUAGE: INTRODUCTION  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
This course is designed to prepare the limited English-speaking person for college ESL study. It bridges the gap between life-skills English and beginning college ESL courses. It is multi-skills oriented, aiming at speaking, listening, reading, writing, and grammar skills.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
ESL 2 (Not Degree Applicable)  
INTERMEDIATE SKILLS FOR
THE ESL STUDENT  5.0 UNITS  
Class hours: 5.0 Lecture/1.0 Laboratory  
Prerequisite: Satisfactory completion of the English As a Second Language Placement Process or ESL 1 or equivalent with a grade of Pass or "C" or higher.  
This course introduces and reviews basic structures of English and provides opportunity for practice in speech and writing. Texts and supplemental materials are used as well as students' personal experiences. English sounds are introduced and practiced. Writing and reading elements of the course stress comprehension.

ESL 3 (Not Degree Applicable)  
ADVANCE INTERMEDIATE SKILLS-ESL STUDENT  5.0 UNITS  
Class hours: 5.0 Lecture/1.0 Laboratory  
Prerequisite: Satisfactory completion of the English As a Second Language Placement Process or ESL 2 or equivalent with a grade of Pass 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  3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
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: 1.5 Lecture  
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: 1.5 Lecture/0.5 Laboratory  
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 for a maximum of 2 times.

ESL 14 (Not Degree Applicable)  
PRONUNCIATION PLUS  3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
This is an intensive pronunciation course that includes practice with the sounds of American English in all contexts: syllables, words, sentences, and conversation and an in-depth practice of the stress and international 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 for a maximum of 2 times.

ESL 15 (Not Degree Applicable)  
ESL INDIVIDUALIZED COMMUNICATION FOR ACADEMIC SUCCESS  0.5 UNIT  
Class hours: 2.0 Laboratory  
This course is intended for ESL students who need to improve their speaking and listening skills to transition from non-credit to credit academic college-level courses. Coursework consists of a variety of self-study modules and includes role-playing situations for practice of actual classroom situations. Aural and oral communication skills are emphasized. The individual instructor selects topics that include academic vocabulary used in college settings, college instructor expectations, and explanation of cultural differences in relation to the college setting. This course may be taken a maximum of 4 times.

ESL 16 (Not Degree Applicable)  
ESL SPEAKING AND LISTENING  3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
Recommended: ESL 10 or equivalent with a grade of Credit or "C" or higher.  
This course is a continuation of ESL 10. Students practice oral communication and listening skills. Fluency, correct usage, and syntax are emphasized. Topics are of a more abstract nature.

ESL 17 (Not Degree Applicable)  
ESL SPEAKING AND LISTENING  3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
Recommended: ESL 10 or equivalent with a grade of Credit or "C" or higher.  
This course is a continuation of ESL 10. Students practice oral communication and listening skills. Fluency, correct usage, and syntax are emphasized. Topics are of a more abstract nature.

ESL 18 (Not Degree Applicable)  
ESL SPEAKING AND LISTENING  3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
Recommended: ESL 10 or equivalent with a grade of Credit or "C" or higher.  
This course is a continuation of ESL 10. Students practice oral communication and listening skills. Fluency, correct usage, and syntax are emphasized. Topics are of a more abstract nature.

ESL 19 (Not Degree Applicable)  
ESL SPEAKING AND LISTENING  3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
Recommended: ESL 10 or equivalent with a grade of Credit or "C" or higher.  
This course is a continuation of ESL 10. Students practice oral communication and listening skills. Fluency, correct usage, and syntax are emphasized. Topics are of a more abstract nature.

ESL 20 (Not Degree Applicable)  
ESL SPEAKING AND LISTENING  3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
Recommended: ESL 10 or equivalent with a grade of Credit or "C" or higher.  
This course is a continuation of ESL 10. Students practice oral communication and listening skills. Fluency, correct usage, and syntax are emphasized. Topics are of a more abstract nature.

ESL 21 (Not Degree Applicable)  
ESL READING  1.5 UNITS  
Class hours: 1.5 Lecture  
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 22 (Not Degree Applicable)  
ESL ORAL COMMUNICATION  1.5 UNITS  
Class hours: 1.5 Lecture/0.5 Laboratory  
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 for a maximum of 2 times.

ESL 23 (Not Degree Applicable)  
ESL SPELLING  1.5 UNITS  
Class hours: 1.5 Lecture/0.5 Laboratory  
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 for a maximum of 2 times.

ESL 24 (Not Degree Applicable)  
ESL ADVANCED VOCABULARY  3.0 UNITS  
Class hours: 3.0 Lecture  
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 33 (Not Degree Applicable)
ENGLISH FOR SPECIFIC

PURPOSES 1.5 UNITS
Class hours: 1.5 Lecture
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 for a maximum of 2 times.

ESL 34 (Not Degree Applicable)
ESL STUDY SKILLS 1.5 UNITS
Class hours: 1.5 Lecture
This course is for the student who plans on entering college classes and wants to improve listening skills and learning strategies. Emphasis is on methods for reading text books efficiently, taking notes, understanding textbook assignments, and preparing for examinations.

ESL 35 (Not Degree Applicable)
EDITING ADVANCED
GRAMMAR/SYNTAX 1.5 UNITS
Class hours: 1.5 Lecture/0.5 Laboratory
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 for a maximum of 4 times.

ESL 100
ESL WRITING AND
STRUCTURE 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: Satisfactory completion of the English As A Second Language Placement Process or ESL 3 or equivalent with a grade of Pass or "C" or higher.
This course reviews syntax and sentence structure. Students write complex sentences 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 on ideas drawn from supplemental materials.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these ESL courses with #3 combined: maximum credit, 8 units.

ESL 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

ESL 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

FIN 52
BUSINESS MATHEMATICS FOR ACCOUNTING APPLICATIONS 1.5 UNITS
Class hours: 1.5 Lecture
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, markups and markdowns, simple and compound interest, and finance charges. (Formerly BUSF 52)

FIN 125
PERSONAL FINANCE  3.0 UNITS
Class hours: 3.0 Lecture
This course is designed to empower individuals with various tools to manage their money and make sound lifelong financial decisions. Students will understand the social and psychological issues related to money and learn established measurement techniques to analyze, plan, and manage their financial lives. Topics include financial planning, income and expense management, investment analysis, retirement planning, consumerism, insurance, estate planning, home ownership, and credit management. (Formerly BUSF 125)
Transfer Credit: CSU

FIN 126
INTRODUCTION TO STOCK
MARKET AND INVESTMENTS  3.0 UNITS
Class hours: 3.0 Lecture
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 exchanges; how stocks are traded and reported in the newspaper; investment vocabulary, mutual funds, and investment companies. (Formerly BUSF 126)
Transfer Credit: CSU

FRENCH
(Liberal Arts Division)

FREN 101  (CAN FREN 2) (CAN FREN SEQ A)
ELEMENTARY FRENCH  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
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 4) (CAN FREN SEQ A)
ELEMENTARY FRENCH  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
Prerequisite: FREN 101 or equivalent with a grade of Pass 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 B) (CAN FREN SEQ B)
INTERMEDIATE FRENCH  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
Prerequisite: FREN 102 or equivalent with a grade of Pass 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  4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: FREN 201 or equivalent with a grade of Pass 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 202 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 I  4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: FREN 202 or equivalent with a grade of Pass 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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: FREN 102 or equivalent with a grade of Pass or “C” or higher.
This course gives the student practice in speaking and understanding current 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

FREN 282
INTERMEDIATE CONVERSATIONAL FRENCH  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: FREN 281 or equivalent with a grade of Pass 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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: FREN 282 or equivalent with a grade of Pass 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

FREN 298
DIRECTED STUDIES  1.0 UNIT
Class hours: 3.0 Independent Study
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

FREN 299
DIRECTED STUDIES  2.0 UNITS
Class hours: 6.0 Independent Study
A course to provide opportunity for individual research and field projects under the direction of a faculty member in a given department.

Transfer Credit: CSU; UC

Announcement of Courses
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

**GEOGRAPHY**

(Science, Engineering, Mathematics Division)

**GEOG 101**  
**PHYSICAL GEOGRAPHY**  
3.0 UNITS  
Class hours: 3.0 Lecture  
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**  
1.0 UNIT  
Class hours: 3.0 Laboratory  
Prerequisite: GEOG 101 or equivalent with a grade of Pass or "C" or higher, or concurrent enrollment.  
This laboratory/field study is designed to supplement GEOG 101. It introduces the global physical world, its dynamics and spatial relationships. The physical environment is presented as an 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**  
**NATURAL AND CULTURAL GEOGRAPHY**  
3.0 UNITS  
Class hours: 3.0 Lecture  
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 103**  
**ENVIRONMENTAL GEOGRAPHY**  
3.0 UNITS  
Class hours: 3.0 Lecture  
This course is a survey of global environmental issues and the effects on society. Emphasis is placed on Earth's systems, sustainability, population concerns, global warming, energy use, pollution, and availability of natural resources.  
Transfer Credit: CSU; UC

**GEOG 105**  
**WORLD REGIONAL GEOGRAPHY**  
3.0 UNITS  
Class hours: 3.0 Lecture  
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

**GEOG 298**  
**DIRECTED STUDIES**  
1.0 UNIT  
Class hours: 3.0 Independent Study  
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

**GEOG 299**  
**DIRECTED STUDIES**  
2.0 UNITS  
Class hours: 6.0 Independent Study  
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

**GEOL 100**  
**NATURAL HISTORY OF SO CALIFORNIA**  
1.0 UNIT  
Class hours: 0.5 Lecture/1.5 Laboratory  
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 recreational value will be studied. This course may be taken for a maximum of 2 times.  
Transfer Credit: CSU

**GEOL 101**  
**PHYSICAL GEOLOGY**  
4.0 UNITS  
Class hours: 3.0 Lecture/4.0 Laboratory  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher. Recommendation: Satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Pass or "C" or higher.  
This introductory course deals with the composition and structure of the earth. Internal and external forces by which the earth's crust and surface have been and are being changed are emphasized.  
Transfer Credit: CSU; UC*  
*UC credit limits may apply. GEOL 101 and GEOL 110 combined: maximum credit, one course.

**GEOL 201**  
**EARTH HISTORY**  
4.0 UNITS  
Class hours: 3.0 Lecture/3.0 Laboratory  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Pass or "C" or higher.  
This course concerns the origin and geological history of the earth and the evolution of its plant and animal inhabitants. Laboratory work includes exercises in the study of the principal
fossil life of geologic time and exercises in the interpretation of earth history. Transfer Credit: CSU; UC

**GEOL 204**
**GEOLOGY OF THE WESTERN NATIONAL PARKS AND MONUMENTS 3.0 UNITS**
Class hours: 3.0 Lecture/3.0 Laboratory
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
A study of the geologic processes which shaped selected national parks and monuments of Western North America. Transfer Credit: CSU

**GEOL 207**
**PALEONTOLOGY, LIFE OF THE PAST 4.0 UNITS**
Class hours: 3.0 Lecture/3.0 Laboratory
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Pass 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 208**
**THE AGE OF THE DINOSAURS 3.0 UNITS**
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This is an integrated course designed to give broad, general knowledge in the areas of nonavian dinosaur origins, evolution, lifestyles, habitat, and extinction. It will also provide an in-depth coverage of the origin of avian dinosaurs and other life forms of the Age of Dinosaurs. Two field trips are required. Transfer Credit: CSU; UC

**GEOL 209**
**NATURAL DISASTERS 3.0 UNITS**
Class hours: 2.5 Lecture/1.0 Laboratory
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This course is an introduction to the study of natural disasters, including how the origins are explained by atmospheric disturbances and plate tectonics, and how new knowledge can be applied to the betterment of human welfare. Transfer Credit: CSU; UC

**GEOL 298**
**DIRECTED STUDIES 1.0 UNIT**
Class hours: 3.0 Independent Study
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

**GEOL 299**
**DIRECTED STUDIES 2.0 UNITS**
Class hours: 6.0 Independent Study
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

**GERM 101**
**ELEMENTARY GERMAN 5.0 UNITS**
Class hours: 5.0 Lecture/1.0 Laboratory
Prerequisite: GERM 101 or equivalent with a grade of Pass 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 class, conducted primarily in German, will further develop the appreciation of cultural diversity. Transfer Credit: CSU; UC

**GERM 201**
**INTERMEDIATE GERMAN 4.0 UNITS**
Class hours: 4.0 Lecture
Prerequisite: GERM 102 or equivalent with a grade of Pass 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**
**INTERMEDIATE GERMAN 4.0 UNITS**
Class hours: 4.0 Lecture
Prerequisite: GERM 201 or equivalent with a grade of Pass or "C" or higher.
This course provides a continued review and an in-depth study of grammatical concepts and reading and interpretation of literary works by German writers. 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 4.0 UNITS**
Class hours: 4.0 Lecture
Prerequisite: GERM 202 or equivalent with a grade of Pass 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

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GERM 204
SCIENTIFIC GERMAN 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: GERM 203 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: GERM 102 or equivalent with a grade of Pass or "C" or higher.
This course gives the student practice in speaking and understanding German as used in travel, in the home, in school, and in everyday life. Emphasis is placed on vocabulary, idioms, and language patterns fundamental to an active and practical use of German. This course is recommended for all German majors and develops the appreciation of cultural diversity.
Transfer Credit: CSU; UC

GERM 282
INTERMEDIATE CONVERSATIONAL GERMAN 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: GERM 281 or equivalent with a grade of Pass 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 291
GERMAN FOR INTERNATIONAL COMMERCE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: GERM 102 or equivalent with a grade of Pass or "C" or higher.
Recommendation: GERM 201 or equivalent with a grade of Pass or "C" or higher.
This course will further introduce students to the vocabulary used in German business and economy and will give an insight into the customs used in the German business world where they differ from American customs.
Transfer Credit: CSU

GERM 292
GERMAN FOR INTERNATIONAL COMMERCE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: GERM 102 or equivalent with a grade of Pass or "C" or higher.
Recommendation: GERM 201 or equivalent with a grade of Pass or "C" or higher.
This course will further introduce students to the vocabulary used in German business and economy and will give an insight into the customs used in the German business world where they differ from American customs.
Transfer Credit: CSU

GERM 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

GERM 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

HEALTH EDUCATION
(Health, Physical Education Division)

HED 100
CONTEMPORARY HEALTH PROBLEMS 3.0 UNITS
Class hours: 3.0 Lecture
Students will identify, analyze, and seek solutions to contemporary health issues. The learner will be exposed to such health components as improving nutrition and physical fitness, enhancing mental and emotional health, creating healthy and caring relationships, avoiding and overcoming destructive habits, preventing and fighting disease, and facing life’s transitions.
Transfer Credit: CSU; UC

HED 101
STRESS MANAGEMENT 3.0 UNITS
Class hours: 3.0 Lecture
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

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Announcement of Courses

HED 103
WOMEN, THEIR BODIES AND HEALTH 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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

HED 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

HED 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

HEALTH OCCUPATIONS
(Health Occupations Division)

HO 7 (Not Degree Applicable)
CARDIOPULMONARY RESUSCITATION 0.5 UNIT
Class hours: 0.5 Lecture
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 for 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 3.0 UNITS
Class hours: 3 lecture
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 HO9L will be eligible for verification of course completion. The combination of HO9 and HO9L 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-I Basic. This course may be taken a maximum of 2 times and does not guarantee state certification.

HO 9L (Not Degree Applicable)
EMERGENCY MEDICAL TECHNICIAN I LAB 2.0 UNITS
Class hours: 6.5 Laboratory
Corequisite: HO 9
This course is designed to teach the student the practical skills necessary to perform pre-hospital emergency care. Areas of instruction include scene and physical patient assessment, safe and proper utilization of equipment, and hospital and ambulance clinical experience. Successful candidates in HO 9 and HO9L will be eligible for verification of course completion. The combination of HO 9 and HO9L 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 - 1 or Basic. This course may be taken for a maximum of 2 times and does not guarantee state certification. Uniform will be required. Clearance of criminal background check may be required prior to clinical field experience.

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Announcement of Courses

HO 53
ELECTROCARDIOGRAPHY  1.0 UNIT
Class hours: 0.7 Lecture/1.0 Laboratory
Corequisite: Current CPR for Professional Rescuer Certification.
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  1.0 UNIT
Class hours: 0.7 Lecture/1.0 Laboratory
This course will provide the student with knowledge and skills concerning the theoretical and procedural requirements for performing several lab procedures. This course follows guidelines set forth by both state and national regulations including, but not limited to, the parameters of waived testing as set by CLIA (Clinical Laboratory Improvement Act of 1988).

HO 55
PHLEBOTOMY PROCEDURES  1.0 UNIT
Class hours: 0.7 Lecture/1.0 Laboratory
This class provides thirty hours of Phlebotomy training, in classroom instruction and hands-on application. Topics of instruction and testing include, but are not limited to the following: venipuncture and capillary puncture procedures, OSHA Bloodborne Pathogen Training, anatomy and physiology of the vascular system, patient care and special considerations, equipment selection, and blood processing. This course does not meet requirements for state certification for phlebotomist.

HO 56
MEDICATION CALCULATIONS  1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: MATH 40 or equivalent with a grade of Pass or “C” or higher or satisfactory completion of the Math Placement Process.
This course presents skills and concepts utilized to calculate drug dosage. Problem solving, application of basic algebraic concepts, formulas, proportional relationships, systems of measurement, and measurement system conversions will be included. This course may be taken for a maximum of 2 times.

HO 100
HEALTH OF UNDERSERVED COMMUNITIES  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: ENGL 52 and MATH 60 or equivalent with grades of Pass or “C” or higher.
By providing an overview of the dynamics and processes underlying the health profiles of Latinos/Latinas another underrepresented minorities in Los Angeles County, this class aims to transform the student’s individual interest in health into a professional health career goal. Population projections, population characteristics, birth rates and outcomes, causes of death and death rates, patterns of reportable diseases, services utilization, patterns of immigration, health insurances, provider training, risk behaviors, and chronic diseases will be surveyed.
Transfer Credit: CSU; UC

HO 150
PROFESSIONAL/ CPR AND FIRST AID  3.0 UNITS
Class hours: 3.0 Lecture
This course for allied health students will cover cardiopulmonary resuscitation and first aid techniques as specified by the American Red Cross. Topics will include one-and-two person CPR for infants, children, and adults; resuscitation with mask and bag-valve mask; automated external defibrillator (AED); and early intervention for wounds, burns, trauma and sudden illness. A Professional Rescuer CPR Card valid for one year and a Standard First Aid Certificate valid for three years will be earned with successful completion of the course.
Transfer Credit: CSU

HO 151
ELEMENTS OF NUTRITION  2.0 UNITS
Class hours: 2.0 Lecture
This course is an introduction to the basic principles of nutrition. Course content includes daily nutrient requirements, life cycle needs, food selection and meal planning for health. Weight maintenance strategies and consumer information are included. This course is designed to meet the requirement for medical assisting and culinary arts’ majors and also meets the minimum requirement for nursing majors.
Transfer Credit: CSU

HO 152
NORMAL AND THERAPEUTIC NUTRITION  3.0 UNITS
(CAN FCS 2)
Class hours: 3.0 Lecture
Recommendation: A&P 150 and A&P 151 or equivalent with grades of Pass or “C” or higher.
This course is an introduction to basic principles of normal and therapeutic nutrition. Emphasis is placed on nutritional requirements and food selection in health and disease. Course content includes life cycle needs, weight maintenance strategies and discussion of common medical disorders and their relation to diet. This course is designed to meet the requirement for dental hygiene and nursing majors.
Transfer Credit: CSU; UC

HO 236
LIFE SPAN/HEALTH ISSUES 1  1.0 UNIT
Class hours: 1.0 Lecture
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  1.0 UNIT
Class hours: 1.0 Lecture
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 students who have received credit for HO 15.
Transfer Credit: CSU

HO 298
DIRECTED STUDIES  1.0 UNIT
Class hours: 3.0 Independent Study
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

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HIST 101
AMERICAN HISTORY AND CONSTITUTION 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 with a grade of Pass 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  (CAN HIST 8) (CAN HIST SEQ B)
POLITICAL AND SOCIAL HISTORY OF THE UNITED STATES: 1500S TO 1876 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.

HIST 103  (CAN HIST 10) (CAN HIST SEQ B)
POLITICAL AND SOCIAL HISTORY OF THE UNITED STATES: 1877 TO PRESENT 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 with a grade of Pass or "C" or higher.
A survey of cultural, diplomatic, economic, ethnic, political and social trends in recent United States history from 1877 to the present, focusing on the roles played by the diverse peoples and cultures who shared in the development of the United States. 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 and HIST 210 combined: maximum credit, one course.

HIST 110
AFRICAN/AMERICAN HISTORY 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Pass or "C" or higher.

HIST 120
HISTORY OF CALIFORNIA 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Pass or "C" or higher.
This course is a survey of cultural, diplomatic, 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 3.0 UNITS
Class hours: 3.0 Lecture
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 Pass or "C" or higher.

HIST 210
HISTORY OF THE UNITED STATES IN THE POST WORLD WAR II ERA 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This lecture/discussion course examines and analyzes the development of the United States from 1945 to the present. Attention is given to the political, social, intellectual, cultural, and economic changes in American society. Included as areas of inquiry will be the impact of the Cold War on foreign and domestic
policies and society; the effect of social protest movements on society; the interconnected influence of economic, demographic, and cultural changes on policy and society; 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 220
HISTORY OF THE AMERICAS 3.0 UNITS

Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READING 43 with a grade of Pass or "C" or higher.

This course covers the histories of Latin America, Canada, and the United States as an integrated whole. Emphasis is given to the Pre-Columbian setting, Native American heritage, the European conquest and legacy, distinctive colonial institutions, and the growth of independence movements. Major political, social, economic, and cultural factors will be presented focusing on the roles played by the diverse people and cultures who shared in the development of the nations of the Western hemisphere.

Transfer Credit: CSU; UC

HIST 221
HISTORY OF THE AMERICAS 3.0 UNITS

Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READING 43 with a grade of Pass 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 230
HISTORY OF MEXICO 3.0 UNITS

Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READING 43 with a grade of Pass or "C" or higher.

This course is a survey of the history of Mexico from the Pre-Columbian period to the present day. It examines 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 3.0 UNITS

Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READING 43 with a grade of Pass or "C" or higher.

This course is an examination of the origins and development of civilizations in Africa, the Americas, Asia, and Europe from the 1500's to the present day. 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 expansion of empire.

Transfer Credit: CSU; UC

HIST 241 (CAN HIST 2) (CAN HIST SEQ A)
WESTERN CIVILIZATION 3.0 UNITS

Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.

History 241 is a survey of the development of Western Civilization from the prehistoric 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 4) (CAN HIST SEQ A)
WESTERN CIVILIZATION 3.0 UNITS

Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.

This course 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 3.0 UNITS

Class hours: 3.0 Lecture
Recommendation: READ 54 and ENGL 52 or equivalent with grades of Pass 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 PRESENT 3.0 UNITS

Class hours: 3.0 Lecture
Recommendation: READ 54 and ENGL 52 or equivalent with grades of Pass 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 expansion of empire.

Transfer Credit: CSU; UC

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HIST 250  
HISTORY OF ENGLAND, GREAT BRITAIN AND THE COMMONWEALTH 3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Pass 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. This course is not open to students who have credit in both HIST 5.1 and HIST 5.2.  
Transfer Credit: CSU; UC  

HIST 255  
HISTORY OF RUSSIA AND THE SOVIET UNION 3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Pass 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 3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Pass 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 3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 with a grade of Pass 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 3.0 UNITS  
Class hours: 3.0 Lecture  
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 for a maximum of 2 times.  
Transfer Credit: CSU, UC credit determined after admission.  

HIST 275  
GLOBAL STUDIES 3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 or equivalent with a grade of Pass or "C" or higher.  
In this course students study the patterns and processes of global change and international institutions in the post-World War II period. Students are introduced to an array of concepts and theoretical perspectives to understand the global conditions that act as catalysts to world problems and challenges. This course examines how the world community organizes its responses to serious international problems.  
Transfer Credit: CSU  

HIST 298  
DIRECTED STUDIES 1.0 UNIT  
Class hours: 3.0 Independent Study  
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  

HIST 299  
DIRECTED STUDIES 2.0 UNITS  
Class hours: 6.0 Independent Study  
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  

HUMANITIES  
(Fine Arts, Communication Division)  

HUM 100  
THE ART OF BEING HUMAN 3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass or "C" or higher, are strongly recommended.  
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 students. 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 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass 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. This course is not open to students who are enrolled in or who have received credit in ART 108.
Transfer Credit: CSU; UC

HUM 109
GENDER AND
SEXUALITY IN ART 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: ENGL 52 and READ 54 or equivalent with grades of Pass or “C” or higher, is strongly recommended.
This class 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. This course is not open to students who are enrolled in or who have received credit in ART 109.
Transfer Credit: CSU; UC

HUM 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

HUM 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

INSR 121
INSURANCE PRINCIPLES:
PROPERTY AND LIABILITY 3.0 UNITS
Class hours: 3.0 Lecture
This course will help individuals learn basic information concerning property and liability insurance. The first segment of the course covers the fundamentals of insurance, including types of insurers, institutions that provide insurance, how it is regulated, and measurements of financial performance. The second segment includes insurance operations, such as marketing, underwriting, and claims. The final segment covers insurance contracts, loss exposure, and risk management.
(Formerly BUSA 121)
Transfer Credit: CSU

INSR 122
PERSONAL INSURANCE 3.0 UNITS
Class hours: 3.0 Lecture
This course is intended to assist individuals in learning basic information regarding personal insurance. It is of value to anyone majoring in business or anyone who does not possess the knowledge to handle personal insurance needs. Topics include information about automobile insurance, homeowners insurance, other residential insurance, such as fire and earthquake insurance, marine insurance, other personal property and liability insurance, financial planning, life insurance, and health insurance.
Transfer Credit: CSU

INSR 123
COMMERCIAL INSURANCE 3.0 UNITS
Class hours: 3.0 Lecture
This course is intended to help individuals learn basic information regarding the whole area of commercial insurance. Covered in this course is information concerning commercial property insurance, business income insurance, commercial crime insurance, equipment breakdown insurance, inland and ocean marine insurance, commercial general liability insurance, commercial automobile insurance, business owners policies and farm insurance,
workers compensation and employers liability insurance, and other miscellaneous coverage.  
Transfer Credit: CSU

**INST 171**  
**INSURANCE OCCUPATIONAL WORK EXPERIENCE**  
1.0 UNIT  
Class hours: 1.0 hour/week coordination class.  
Corequisite: Enrollment in 7 or more units, including Insurance Occupational Work Experience.  
One unit of Insurance Occupational Work Experience requires 72 non-paid hours or 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 4 times.  
Transfer Credit: CSU

**INTERDISCIPLINARY STUDIES**  
(Humanities, Social Science Division)

**INST 100**  
**PRINCIPLES AND STRATEGIES FOR PROBLEM SOLVING**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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**  
3.0 UNITS  
Class hours: 3.0 Lecture  
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 reintege into society.  
Transfer Credit: CSU

**INST 152**  
**HELPING RELATIONSHIPS**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Prerequisite: INST 151 with a grade of Pass or “C” or higher.  
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

**INST 272**  
**SPECIAL POPULATIONS**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Prerequisite: INST 151 with a grade of Pass or “C” or higher.  
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**  
(Liberal Arts Division)

**JAPN 101**  
**ELEMENTARY JAPANESE**  
5.0 UNITS  
Class hours: 5.0 Lecture/1.0 Laboratory  
Prerequisite: JAPN 101 or equivalent with a grade of Pass or “C” or higher.  
This beginning Japanese course emphasizes 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
JAPN 282
INTERMEDIATE
CONVERSATIONAL
JAPANESE    3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: JAPN 281 or equivalent with a grade of Pass or "C" or higher.
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    3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: JAPN 282 or equivalent with a grade of Pass or "C" or higher.
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

JAPN 298
DIRECTED STUDIES    1.0 UNIT
Class hours: 3.0 Independent Study
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 UC campus, pending review of appropriate course materials by UC staff. See a counselor for an explanation.
Transfer Credit: CSU

JAPN 299
DIRECTED STUDIES    2.0 UNITS
Class hours: 6.0 Independent Study
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 UC campus, pending review of appropriate course materials by UC staff. See a counselor for an explanation.
Transfer Credit: CSU

JOUR 101
BEGINNING NEWSWRITING AND REPORTING    3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This course focuses on the principles of newsgathering and newswriting, with emphasis on journalistic writing. Basic news story structure and development, news evaluation, newsgathering methods, interviewing, craftsmanship, and reporting techniques in general are explored. Newspaper and other news and information media are analyzed. 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

JOUR 103
NEWSPAPER
ARTICLE WRITING    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: JOUR 101 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment, and satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 for a maximum of 4 times. Credit/No Credit option available for non-journalism majors.
Transfer Credit: CSU

JOUR 105
NEWSPAPER PRODUCTION    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: ART 188 or CIS 205 or JOUR 120 or equivalent with a grade of Pass 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

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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copy editing skills. Skills acquired will be
for journalism students who wish to improve
in news stories. This course is recommended
and general grammar skills commonly found
and improving sentence structure, spelling,
This course focuses on copy editing and word
completion of JOUR 101 with a grade of Pass
Recommendation: Concurrent enrollment or
Transfer Credit: CSU

JOUR 111
INTRODUCTION TO NEWSLETTERS 1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: ENGL 52 or JOUR 101 or equivalent with a grade of Pass 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 120
INTERNET FOR JOURNALISTS 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: CIS 121 or equivalent with a grade of Pass 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 for a maximum of 4 times.
Transfer Credit: CSU

JOUR 121
MULTIMEDIA REPORTING 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Recommendation: JOUR 101 or equivalent with a grade of Pass or "C" or higher.
This course will provide a basic introduction to multimedia storytelling with a journalism emphasis. Techniques that will be explored include use of video, photos, audio, animation, and text to convey interactive news and feature stories through the World Wide Web and other electronic media. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

JOUR 122
CREATING PODCASTS FOR MEDIA 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Recommendation: JOUR 101 or RTV 152 or equivalent with a grade of Pass or "C" or higher.
This course teaches the principles and practice of writing for audio podcasts emphasizing news and information. Short podcast shows will be developed in class. Current podcast shows will be analyzed and evaluated for structure. Students will learn microphone techniques, the use of audio, studio procedure, and how to develop appropriate content for a podcast show or newscast. Current technology and digital format will be utilized to produce individual podcasts.
Transfer Credit: CSU

JOUR 130
PHOTO JOURNALISM 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: PHOT 100 or equivalent with a grade of Pass or "C" or higher.
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 must have access to a manually operable camera. This course is not open to students who are enrolled in or who have received credit in PHOT 130.
Transfer Credit: CSU

JOUR 157
PRINCIPLES OF PUBLIC RELATIONS 3.0 UNITS
Class hours: 3.0 Lecture
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. This course is not available for students who are enrolled in or have completed BA 157. (Formerly JOUR 110)
Transfer Credit: CSU

JOUR 160L
COLLEGE MAGAZINE PRODUCTION 1.0 UNIT
Class hours: 3.0 Laboratory
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. It provides a format for the application of photojournalism, feature article and page design skills, and writing skills. This course may be taken for a maximum of 4 times.
Transfer Credit: CSU

JOUR 170
BROADCAST NEWS/WEBCASTING 1.0 UNIT
Class hours: 0.5 Lecture/1.0 Laboratory
Prerequisite: Concurrent enrollment or completion of JOUR 101 with a grade of Pass or "C" or higher.
Recommendation: Concurrent enrollment or completion of JOUR 103 and/or concurrent enrollment or completion of RTV 152.
This course focuses on broadcast newswriting and production techniques using the college radio station, WPMD, as a practical laboratory. Students will develop and research story ideas for regular news broadcasts on WPMD.
Newsgathering and reporting for broadcast will be emphasized, along with ethics and legal aspects of communication. This course is not open to students currently enrolled in or who have completed RTV 170. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

JOUR 171
OCCUPATIONAL WORK
EXPERIENCE IN JOURNALISM 1.0 UNIT
Class hours: 1 lecture
Prerequisite: JOUR 101 or equivalent 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.
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 299
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

JOUR 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

LAW
(Business Division)

LAW 1T (Not Degree Applicable)
LEGAL-COMPUTER TUTORIAL 0.5 UNIT
Class hours: 1.0 Laboratory
Corequisite: Concurrent enrollment in one or more LAW class.
Recommendation: LAW 56 with a grade of Pass or "C" or higher.
This course is designed to assist development in computer applications in the advanced Law courses. Students must attend one hour minimum per week and are limited to a maximum of three hours per week. This course may be taken a maximum of 4 times. (Formerly BL 1T)

LAW 52
LAW OFFICE MANAGEMENT 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: LAW 56 or BCOT 108 or equivalent with a grade of Pass 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. (Formerly BL 52)

LAW 56
INTRODUCTION TO COMPUTERIZED LEGAL SOFTWARE 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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. (Formerly BL 56)

LAW 57
LEGAL DOCUMENT PRODUCTION 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LAW 56 or BCOT 108 or equivalent with a grade of Pass or "C" or higher.
This is a course in the production of legal documents using WordPerfect. Topics covered include the development and production of client worksheets, fee agreements, fax forms, interrogatories, legal briefs, office newsletters, deposition summaries, pleadings, and trial notebooks. Students will create these legal documents on a computer. (Formerly BL 57)

LAW 65
ADVANCED LEGAL TECHNOLOGY 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LAW 56
This course focuses on the applications and uses of spreadsheet management software, database management software, and graphics presentations software for the law office. Using spreadsheet management software, students will learn to track figures, anticipate income and expenses, prepare financial documents, and maintain information for the law office. Using database software, students will learn to collect, track, analyze and maintain information in the law office. Using graphics presentation software, students will learn to combine text and graphic images to develop computerized slide shows, transparencies and charts for use in the law office. (Formerly BL 65)

LAW 98
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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.

**LAW 99**
**DIRECTED STUDIES**
**2.0 UNITS**
Class hours: 6.0 Independent Study
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 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.

**LAW 100**
**INTRODUCTION TO CALIFORNIA CIVIL PROCEDURES**
**3.0 UNITS**
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LA W 101 and LA W 56 or equivalent with grades of Pass or "C" or higher.
This course is designed to introduce students to the basic techniques of legal research. Emphasis will be placed upon the use of modern legal research materials which include the use of Westlaw and traditional research methods. Computerized legal research 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. (Formerly BL 101)
Transfer Credit: CSU

**LAW 102**
**ADVANCED CALIFORNIA CIVIL PROCEDURES**
**3.0 UNITS**
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: LAW 100 with a grade of Pass or "C" or higher.
Recommendation: LAW 56 with a grade of Pass 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. (Formerly BL 102)
Transfer Credit: CSU

**LAW 103**
**LEGAL RESEARCH**
**3.0 UNITS**
Class hours: 3.0 Lecture
Recommendation: LAW 101 and LAW 56 or equivalent with grades of Pass or "C" or higher.
This course is designed to introduce students to the legal research course for the paralegal student. This course will utilize legal research skills to develop substantive research in the 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. (Formerly BL 104)
Transfer Credit: CSU

**LAW 104**
**ADVANCED LEGAL RESEARCH**
**3.0 UNITS**
Class hours: 3.0 Lecture
Prerequisite: LAW 103 or equivalent with a grade of Pass, or "C" or higher.
Recommendation: LAW 56 or equivalent with a grade of Pass or "C" or higher.
This is an advanced legal research course concentrating in advanced legal research. 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. (Formerly BL 102)
Transfer Credit: CSU

**LAW 105**
**INTRODUCTION TO FEDERAL AND CALIFORNIA EMPLOYMENT, LABOR, AND WORKERS’ COMPENSATION LAW**
**3.0 UNITS**
Class hours: 3.0 Lecture
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 work place. It provides an understanding for both employers and employees of their rights and obligations under these laws. (Formerly BL 105)
Transfer Credit: CSU

**LAW 106**
**BANKRUPTCY LAW**
**3.0 UNITS**
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LAW 56 with a grade of Pass 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. (Formerly BL 106)
Transfer Credit: CSU

**LAW 107**
**PROBATE PROCEDURES**
**3.0 UNITS**
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LAW 56 with a grade of Pass or "C" or higher.
This course acquaints the student with the procedures and laws governing the probate of estates, both testate and intestate, and with procedures to transfer decedent’s property without probate. Emphasis is placed upon correct completion of probate forms, notice requirements, and time limits. Procedures governing guardianship and conservatorship will also be covered. (Formerly BL 107)
Transfer Credit: CSU

**LAW 108**
**FAMILY LAW PROCEDURES**
**3.0 UNITS**
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LAW 56 with a grade of Pass or "C" or higher.
This course acquaints the student with the laws governing family relations and procedures for dissolution of marriage actions. These are: Order to Show Cause Hearings, Trials, and Post Dissolution Proceedings. Preparation of marital termination agreements, types of judgments, adoptions and custody agreements are also presented. (Formerly BL 108)
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

LAW 109
TORTS & PERSONAL INJURY 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
This course is a study of the major areas of torts and personal injury law including interviewing, claims investigation, claims adjustment techniques, and litigation procedures. (Formerly BL 109)
Transfer Credit: CSU

LAW 110
BUSINESS LAW 3.0 UNITS
Class hours: 3.0 Lecture
This is a survey course designed to acquaint 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, BL 110)
Transfer Credit: CSU; UC*
*UC credit limits may apply. LAW 111, LAW 112 and BA 113 combined: maximum credit, one course.

LAW 111
BUSINESS LAW (CAN BUS 8) 3.0 UNITS
Class hours: 3.0 Lecture
This is a course designed to introduce the student to the legal concepts of everyday business transactions. It will include discussions of legal rights, contracts, Uniform 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, BL 111)
Transfer Credit: CSU; UC*
*UC credit limits may apply. LAW 111, LAW 112 and BA 113 combined: maximum credit, one course.

LAW 112
Estate Planning FOR THE PARALEGAL 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LAW 56 with a grade of Pass 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. (Formerly BL 112)
Transfer Credit: CSU

LAW 113
FUNDAMENTALS OF ALTERNATE DISPUTE RESOLUTIONS 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LAW 56 with a grade of Pass 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. (Formerly BL 113)
Transfer Credit: CSU

LAW 114
LAW ON THE INTERNET 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
This course introduces the students to the basic techniques of using the Internet for legal research, general factual research, other law-office related research and research related to legal careers and education. Students learn how to access and use the Internet. Emphasis is placed on search techniques including use of various search engines including legal search engines, refining search queries and performing a variety of searches using the Internet. Both Federal and California state research materials will be used. (Formerly BL 114)
Transfer Credit: CSU

LAW 115
ELDER LAW 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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. (Formerly BL 115)
Transfer Credit: CSU

LAW 116
CRIMINAL LAW 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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. (Formerly BL 116)
Transfer Credit: CSU

LAW 117
LEGAL OCCUPATIONAL WORK EXPERIENCE 1.0 UNIT
Class hours: 1 lecture
Corequisite: Enrollment in 7 or more units, including Legal Occupational Work Experience, in a declared law major. One units of Legal 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. (Formerly BL 171)
Transfer Credit: CSU

LAW 120
LEGAL ETHICS 3.0 UNITS
Class hours: 3.0 Lecture
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/legal assistants, the unauthorized practice of law, issues of confidentiality and conflicts of interest, advertising and solicitation, fees and client funds competence, and professionalism. (Formerly BL 120)
Transfer Credit: CSU

LAW 161
CONSUMER LAW 3.0 UNITS
Class hours: 3.0 Lecture
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, BL 161)
Transfer Credit: CSU

LAW 171
WORK EXPERIENCE/CAREER INTERNSHIP 1.0 UNIT
Class hours: 1 lecture
Corequisite: Enrollment in 7 or more units, including Legal Occupational Work Experience, in a declared law major. One units of Legal 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. (Formerly BL 171)
Transfer Credit: CSU

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LAW 172
LEGAL OCCUPATIONAL
WORK EXPERIENCE  2.0 UNITS
Class hours: 1 lecture
Corequisite: Enrollment in 7 or more units, including Legal Occupational Work Experience, in a declared major. Two units of Legal 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. (Formerly BL 172)
Transfer Credit: CSU

LAW 173
LEGAL OCCUPATIONAL
WORK EXPERIENCE  3.0 UNITS
Class hours: 1 hour/week coordination class.
Corequisite: Enrollment in 7 or more units, including Legal Occupational Work Experience, in a declared major. Three units of Legal Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Legal 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. (Formerly BL 173)
Transfer Credit: CSU

LAW 174
LEGAL OCCUPATIONAL
WORK EXPERIENCE  4.0 UNITS
Class hours: 1 hour/week coordination class.
Corequisite: Enrollment in 7 or more units, including Legal Occupational Work Experience, in a declared major. Three units of Legal Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of Legal 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. (Formerly BL 174)
Transfer Credit: CSU

LAW 230
CORPORATE LAW  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LAW 56 with a grade of Pass 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. (Formerly BL 230)
Transfer Credit: CSU

LAW 260
IMMIGRATION LAW  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: LAW 56 with a grade of Pass or "C" or higher.
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. (Formerly BL 260)
Transfer Credit: CSU

LIBRARY

(Learning Resource Center)

LIBR 100
INTRODUCTION TO
LIBRARY RESOURCES  1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
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

LIBR 298
DIRECTED STUDIES  1.0 UNIT
Class hours: 3.0 Independent Study
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.

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LIBR 299
DIRECTED STUDIES  2.0 UNITS
Class hours: 6.0 Independent Study
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

MACHINE TOOL TECHNOLOGY
(technology Division)

MTT 1L (Not Degree Applicable)
CNC MACHINING LABORATORY  1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: MTT 51 or MTT 76 and MTT 52, MTT 54, MTT 56, MTT 57 and MTT 100 or equivalent with a grade of Pass or "C" or higher.
This course is an independent study on an experimental research basis, using Computer Assisted Manufacturing (CAM) software and Computer Numerical Control (CNC) programming. The student will increase programming skill and knowledge in specialized areas of his/her choice with the guidance of the department. This course may be taken a maximum of 4 times.

MTT 2L (Not Degree Applicable)
MASTERCAM LABORATORY  1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: MTT 51 or MTT 57 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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 (Not Degree Applicable)
VIRTUAL GIBBS LABORATORY  1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: MTT 76 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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.

MTT 4L
MANUAL MACHINING LAB  1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: MTT 56 and MTT 100 or equivalent with grades of Pass "C" or higher.
This course is an independent study on an experimental research basis, using the manual lathe, the manual mill, and associated cutting tools and machines. Students will increase their skill and knowledge in specialized areas of their choice with the approval and guidance of the department. This course may be taken a maximum of 4 times.

MTT 50
CNC SHOP MATH  3.0 UNITS
Class hours: 3.0 Lecture
This course is designed to teach the student how to solve typical and practical mathematical shop problems using a calculator and The Machinery’s Handbook. Particular emphasis will be placed on solving problems of ratio and proportion, measurement system conversion, plane geometry, and right triangles as applied to machine fabricated parts.

MTT 51
MASTERCAM INTRODUCTION  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
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  3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
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 54
CNC BLUEPRINT READING  2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
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  2.0 UNITS
Class hours: 2.0 Lecture
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  2.0 UNITS
Class hours: 2.0 Lecture
This course is designed to give the student a complete understanding of dimensional metrology. The student will also develop skills in preparing inspection reports using all of the appropriate instruments available in a machine shop for validation of part geometry.

MTT 57
SETUP AND OPERATION OF CNC LATHE  3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
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.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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MTT 60
ADVANCED MACHINE TOOL CONCEPTS 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: MTT 100 or equivalent with grades of Pass or "C" or higher or equivalent. This course is designed to augment the student’s knowledge of conventional and automated process techniques. Coursework includes developing advanced skills in lathe and mill setup, materials science, and learning process planning.

MTT 62
FIXTURE TOOLING 2.0 UNITS
Class hours: 2.0 Lecture
This course teaches planning, design, and fabrication methods for fixturing in the machine shop. It includes decision-making, machine planning, cutter selection, tolerancing, rest areas, clamping, blueprint interpretation, and design.

MTT 70
INTRODUCTION TO MODEL MAKING/PROTOTYPE DESIGN 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course will prepare students in the fabrication of prototypes and models. Students will learn how to import a 3D 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 tool paths to CNC machines, and fabricate prototypes and models.

MTT 76
GIBBS-CAM INTRODUCTION 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
This course prepares students to operate the Gibbs-Cam 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 98
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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.

MTT 99
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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.

MTT 100
MACHINE TOOL INTRODUCTION 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course is designed as a survey of machine tool technology. It will stress traditional machine tool technologies. It includes set-up and operation of the engine lathe, the milling machine, the drill press, and testing and cutoff machines. It will also incorporate calculation and setup of speeds and feeds, and measurements. This course is required for all Machine Tool Technology majors.

Transfer Credit: CSU

MTT 154
CNC PROGRAM OPTIMIZATION 2.0 UNITS
Class hours: 2.0 Lecture
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: 2.0 Lecture/2.0 Laboratory
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 manufacture 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 GIBBS-CAM CAD/CAM 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: MTT 76 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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: 3.0 Lecture/2.0 Laboratory
Prerequisite: MTT 51 or equivalent with a grade of Pass 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

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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.

**MFGT 50**  
**HAZ-MAT**  
Class hours: 1.5 Lecture  
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.

**MFGT 51**  
**INTRODUCTION TO COMPUTER INTEGRATED MANUFACTURING (CIM)**  
Class hours: 3.0 Lecture  
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.

**MFGT 52**  
**INTRODUCTION TO LASER CUTTING TECHNOLOGY**  
Class hours: 2.0 Lecture  
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**  
Class hours: 1.5 Lecture  
Recommendation: TM 50 or equivalent with a grade of Pass 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/0.5 Laboratory  
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  
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 studied. 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 9000:2000**  
Class hours: 1.5 Lecture  
This survey course is a study of ISO 9000:2000, 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  
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 to all facets in quality of production within industry is examined.

**MFGT 58**
**BENCHMARKING** 1.5 UNITS
Class hours: 1.5 Lecture
This survey course is for those interested in learning about Benchmarking as a strategic tool in manufacturing environment for continuous quality improvement. Topics will include a definition of Benchmarking, resources available to help in the manufacturing Benchmarking process, case studies and examples of companies that have used Benchmarking methods in production.

**MFGT 59**
**DESIGN OF EXPERIMENTS (DOE)** 1.5 UNITS
Class hours: 1.5 Lecture
This survey course is designed for individuals interested or actively engaged in developing an effective strategy for process improvements. The course will help Quality, Manufacturing and Engineering personnel understand the differences between Lean and Six Sigma, define the distinct power and focus of each, and why they are used together in a synchronized and complimentary way. Merging Lean and Six Sigma initiatives creates culture change, immediate results, and streamlined processes, paving the way for more effective and sustainable results.

**MFGT 60**
**QUALITY ASSURANCE PRINCIPLES** 1.5 UNITS
Class hours: 1.5 Lecture
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 65**
**APPLIED MATH IN MANUFACTURING** 3.0 UNITS
Class hours: 3.0 Lecture
Student will utilize basic mathematic functions to solve applied technical shop problems in the industrial manufacturing work place. Typical applications will emphasize problems encountered by sales, supervision, quality assurance technicians, inspectors, shop floor, and maintenance personnel. Emphasis will be placed on specific hand measurement instruments and devices to solve common manufacturing problems and verify quality.

Problem solving is stressed involving weights and measures, ratios, conversions of standard and metric system measurements, and dimensional and spatial relationships. Students will learn how to interpret manufacturing requirements including process specifications, engineering drawing, symbols and dimensional tolerances.

**MFGT 100**
**MANUFACTURING PROCESSES** 3.0 UNITS
Class hours: 3.0 Lecture
This course provides information on modern manufacturing processes and operations including process materials currently used in industry.

*Transfer Credit: CSU*

**MATH 5** (Not Degree Applicable)
**MATHEMATICS**

*LEARNING STRATEGIES* 1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: Concurrent enrolment in MATH 20, 40, 60, 80, 80A, or 80B.
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 for a maximum of 3 times.

**MATH 20** (Not Degree Applicable)
**BASIC MATHEMATICS** 3.0 UNITS
Class hours: 3.0 Lecture
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 course may be taken in Programmed Learning Sections. See your counselor for details.

**MATH 40** (Not Degree Applicable)
**PRE-ALGEBRA** 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: Concurrent enrolment in MATH 20 or equivalent with a grade of Pass 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 60**
**ELEMENTARY ALGEBRA** 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: Concurrent enrolment in MATH 40 or equivalent with a grade of Pass 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 70**
**PLANE GEOMETRY** 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: Concurrent enrolment in MATH 60 or equivalent with a grade of Pass 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.
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**  
**3.0 UNITS**

Class hours: 3.0 Lecture  
Prerequisite: MATH 60 or equivalent with a grade of Pass or "C" or higher or satisfactory completion of the Math Placement Process. Students who have not taken MATH 60 must attain satisfactory score on the Intermediate Algebra Reading 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, rational exponents and radicals, and graphing linear equations.

**MATH 80B**  
**INTERMEDIATE ALGEBRA II**  
**3.0 UNITS**

Class hours: 3.0 Lecture  
Prerequisite: MATH 80A or equivalent with a grade of Pass 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**  
**2.0 UNITS**

Class hours: 2.0 Lecture  
Prerequisite: MATH 140 or equivalent with a grade of Pass or "C" or higher.

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 for a maximum of 2 times.

**MATH 90B**  
**TRAINING FOR TUTORS OF MATHEMATICS II**  
**2.0 UNITS**

Class hours: 2.0 Lecture  
Prerequisite: MATH 90A or equivalent with a grade of Pass or "C" or higher

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 for a maximum of 2 times.

**MATH 100**  
**LIBERAL ARTS MATHEMATICS**  
**3.0 UNITS**

Class hours: 3.0 Lecture  
Prerequisite: MATH 80 (or MATH 80B) and MATH 70 or equivalent with grades of Pass or "C" or higher.

This is a non-technical 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**  
**3.0 UNITS**

Class hours: 3.0 Lecture/1.0 Laboratory  
Prerequisite: MATH 70, 80, or MATH 80B or equivalent with grades of Pass or "C" or higher.

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**  
**MATHEMATICS FOR ELEMENTARY TEACHERS**  
**3.0 UNITS**

Class hours: 3.0 Lecture/1.0 Laboratory  
Prerequisite: MATH 80 (or MATH 80B) and MATH 70 or equivalent with grades of Pass 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**  
**3.0 UNITS**

Class hours: 3.0 Lecture/1.0 Laboratory  
Prerequisite: MATH 110A or equivalent with a grade of Pass 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**  
**ELEMENTARY STATISTICS**  
**4.0 UNITS**

Class hours: 4.0 Lecture  
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Pass or "C" or higher or satisfactory completion of the Math Placement Process.

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 is a beginning statistics course designed for all majors. A graphing calculator is required.

Transfer Credit: CSU; UC

*MATH 112 combined with PSYC 210: maximum credit, one course.

MATH 114
COLLEGE ALGEBRA 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Pass or "C" or higher or satisfactory completion of the Math Placement Process.

This course is designed for students majoring in life or social sciences. The main topics to be covered include linear and quadratic equations and inequalities, polynomial, rational, exponential, and logarithmic functions and their graphs, systems of linear equations, matrices, sequences and series, combinatorics, and the Binomial Theorem.

Transfer Credit: CSU; UC

*MATH 114 and MATH 150 combined: maximum credit, one course.

MATH 115
FINITE MATHEMATICS 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Pass 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 sets, matrices, system of equations and inequalities, 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

MATH 116
CALCULUS FOR MANAGERIAL, BIOLOGICAL AND SOCIAL SCIENCES 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: MATH 114 or equivalent with a grade of Pass or "C" or higher.

This course is a survey of calculus designed to meet lower division university and four-year college requirements for the management, biology 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

*MATH 116 and MATH 170 combined: maximum credit, one course.

MATH 140
TRIGONOMETRY 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: MATH 80 (or MATH 80B) and MATH 10 or equivalent with grades of Pass or "C" or higher.

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
PRECALCULUS MATH 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: MATH 140 or equivalent with a grade of Pass or "C" or higher.

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

*MATH 150 and MATH 170 combined: maximum credit, one course.

MATH 150A
COMPUTER APPLICATIONS FOR PRECALCULUS 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: MATH 150 or equivalent with a grade of Pass or "C" or higher.

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 170
ANALYTIC GEOMETRY AND CALCULUS I 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: MATH 150 or equivalent with a grade of Pass 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 include differentiation and integration of algebraic, trigonometric functions, and topics from statistics. The necessary topics of analytic geometry are presented as needed to proceed with the principles of calculus.

Transfer Credit: CSU; UC*

*MATH 116 and MATH 170 combined: maximum credit, one course.

MATH 170A
COMPUTER APPLICATIONS FOR CALCULUS I 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: MATH 170 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.

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
ANALYTIC GEOMETRY AND CALCULUS II 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: MATH 170 or equivalent with a grade of Pass 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

*UC credit limits may apply. MA TH 112 and MA TH 170 combined: maximum credit, one course.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
MATH 190A
COMPUTER APPLICATIONS FOR CALCULUS II 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: MATH 190 or equivalent with a grade of Pass or "C" or higher
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

MATH 220 (CAN MATH 22) (CAN MATH SEQ C) ANALYTIC GEOMETRY AND CALCULUS III 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: MATH 190 or equivalent with a grade of Pass 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 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: MATH 190 or equivalent with a grade of Pass or "C" or higher.
Recommendation: MATH 220 or equivalent with a grade of Pass 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

MATH 298 DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

MATH 299 DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

MEDICAL ASSISTING (Health Occupations Division)

MA 60 INTRODUCTION TO MEDICAL ASSISTING 2.0 UNITS
Class hours: 2.0 Lecture
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
Recommendation: MA 161 or equivalent with a grade of Pass 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
Recommendation: MA 62A and MA 161 or equivalent with grades of Pass 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 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
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 SPECIALTIES 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: MA 60.
Recommendation: BCOT 62, and BCOT 3T, or equivalent with grades of Pass 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.

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MA 68  
**MEDICAL ASSISTING**  
**INTERNSHIP EXPERIENCE  4.0 UNITS**  
Class hours: 1.0 Lecture/10.0 Laboratory  
Prerequisite: MA 60, 62, 64, 161, HO 53, 54, and HO 55 or equivalent with grades of Pass or “C” or higher.  
Corequisite: MA 66 and MA 67 or prior completion with a grade of Pass 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  
**MEDICAL ASSISTANT**  
**OCCUPATIONAL WORK EXPERIENCE  3.0 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 Pass 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 Pass 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 98  
**DIRECTED STUDIES  1.0 UNIT**  
Class hours: 3.0 Independent Study  
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.

MA 99  
**DIRECTED STUDIES  2.0 UNITS**  
Class hours: 6.0 Independent Study  
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.

MA 161  
**MEDICAL TERMINOLOGY  3.0 UNITS**  
Class hours: 3.0 Lecture  
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*

**Microbiology**  
(Science, Engineering, Mathematics Division)  

**MICR 200**  
**PRINCIPLES AND APPLICATIONS OF MICROBIOLOGY  5.0 UNITS**  
Class hours: 3.0 Lecture/6.0 Laboratory  
Prerequisite: CHEM 100 or BIOL 120 or ZOOL 120 or equivalent with grades of Pass 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 immuno 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*

**MICR 298**  
**DIRECTED STUDIES  1.0 UNIT**  
Class hours: 3.0 Independent Study  
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*

**MICR 299**  
**DIRECTED STUDIES  2.0 UNITS**  
Class hours: 6.0 Independent Study  
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

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**Announcement of Courses**

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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**

### MUS 103
**JAZZ IN AMERICA** 3.0 UNITS
Class hours: 3.0 Lecture
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** 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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** 3.0 UNITS
Class hours: 3.0 Lecture
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** 3.0 UNITS
Class hours: 3.0 Lecture
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
**MUSIC THEORY/MUSICIANSHIP I** 5.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: MUS 105 or equivalent with a grade of Pass or "C" or higher.

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 107
**MUSIC THEORY/MUSICIANSHIP II** 5.0 UNITS
Class hours: 5.0 Lecture/2.0 Laboratory
Prerequisite: MUS 106 or equivalent with a grade of Pass or "C" or higher.

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 scale degrees, and chordal dictation. There will be the continuing study and usage of music software, rhythm machines, and computer-based notation programs.

**Transfer Credit: CSU; UC**

### MUS 108
**MUSIC THEORY/MUSICIANSHIP THEORY III** 5.0 UNITS
Class hours: 5.0 Lecture/2.0 Laboratory
Prerequisite: MUS 107 or equivalent with a grade of Pass or "C" or higher.

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**
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 7th chords, 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 chromaticism. 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**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
This course focuses on basic study technique, which will include reading, writing, listening and playing. A variety of elementary piano repertoire will be studied. Students learn to understand, experience and appreciate the fundamentals of keyboard musicianship. This course is designed for students with little or no background in piano playing. This course may be taken for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 113**  
**ELEMENTARY**  
**PIANO II**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 112 or equivalent with a grade of Pass or "C" or higher.

This course focuses on the continuation of basic piano, which will include reading, writing, listening and playing. A variety of piano repertoire will be studied. Further emphasis will be on understanding, experiencing and appreciating the fundamentals of keyboard musicianship. This course may be taken for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 114**  
**INTERMEDIATE**  
**PIANO I**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 113 or equivalent with a grade of Pass or "C" or higher.

This course is a continuation of piano student at the intermediate level. A variety of assigned piano repertoire will be studied. Emphasis will be on understanding, experiencing and appreciating more advanced course of keyboard musicianship. This course may be taken for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 115**  
**INTERMEDIATE**  
**PIANO II**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 114 or equivalent with a grade of Pass 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 for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 116**  
**VOICE I**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 116 or equivalent with a grade of Pass or "C" or higher.

This course focuses on basic vocal techniques including breath management, posture, phonation, resonation, 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 for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 117**  
**VOICE II**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 117 or equivalent with a grade of Pass or "C" or higher, or audition.

This course focuses on vocal techniques including breath management, posture, phonation, resonation, 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 for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 118**  
**VOICE III**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 118 or equivalent with a grade of Pass 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 and 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 for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 119**  
**VOICE IV**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 119 or equivalent with a grade of Pass or "C" or higher.

This course continues the student of diction, style, technique, 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 for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 120**  
**ELEMENTARY GUITAR I**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 120 or equivalent with a grade of Pass or "C" or higher.

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 for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 121**  
**ELEMENTARY GUITAR II**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 121 or equivalent with a grade of Pass or "C" or higher, or audition

This course 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 for a maximum of 2 times.

**Transfer Credit:** CSU; UC

**MUS 122**  
**INTERMEDIATE GUITAR I**  
2.0 UNITS  
Class hours: 2.0 Lecture/1.0 Laboratory  
Prerequisite: MUS 122 or equivalent with a grade of Pass 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 for a maximum of 2 times.

Transfer Credit: CSU; UC

MUS 291
COMMUNITY ORCHESTRA
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: MUS 122 or equivalent with a grade of Pass or "C" or higher.
This course may be taken for a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 101
COMMUNITY ORCHESTRA
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
This course may be taken for a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 122
INTERMEDIATE GUITAR II
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: MUS 122 or equivalent with a grade of Pass or "C" or higher.
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 for a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 124
CONCERT BAND
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
The concert band is dedicated to the performance of standard 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 for a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 125
COMMUNITY BAND
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
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 for a maximum of 4 times.
Transfer Credit: CSU

MUS 126
PEP BAND
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
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 for a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply: MUS 126 and Physical Education courses with #’s combined: maximum credit, 4 units.

MUS 127
ORCHESTRA
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
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 for a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 128
COMMUNITY ORCHESTRA
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
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 for a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 130
BRASS ENSEMBLE
Class hours: 1.0 Lecture/2.0 Laboratory
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 for a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 131
PERCUSSION ENSEMBLE
Class hours: 2.0 Laboratory
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 for a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 132
GUITAR ENSEMBLE
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: MUS 120 or equivalent with a grade of Pass or "C" or higher, or audition
This course is for the intermediate and advanced guitar student, who will gain experience performing music in ensemble situations. Emphasis is given in achieving a professional level of musicianship. Students...
will be required to perform two concerts, attend extra rehearsals, perform in festivals, practice in music department facilities and provide concert music for campus events. This course may be taken for a maximum of 4 times.

Transfer Credit: CSU; UC

MUS 133
STAGE BAND 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
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 for a maximum of 4 times.

Transfer Credit: CSU

MUS 134
JAZZ ENSEMBLE 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
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 for a maximum of 4 times.

Transfer Credit: CSU; UC

MUS 135
THIS BUSINESS OF MUSIC 3.0 UNITS
Class hours: 3.0 Lecture
This course focuses on the music business as it relates to the market place and job opportunities. It teaches the student about the important jobs in the industry and their duties and responsibilities. Topics include the process of promotion, publicity, management, touring, recording, contracts, accounting, artists relations and development, marketing, advertising, copyrights, and related music fields.

Transfer Credit: CSU

MUS 136
STRING ENSEMBLE 1.5 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
Prerequisite: Audition
This class provides each individual student the opportunity to learn and execute the principles of string 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 for a maximum of 4 times.

Transfer Credit: CSU; UC

MUS 138
COMMUNITY CHORUS 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
This choral ensemble is designed for the student who has little or no previous vocal experience. Emphasis will be placed on the development of individual musicianship through the study of musical styles, vocal concepts and repertoire. A variety of traditional choral music ranging from renaissance to the twentieth century will be studied and performed. Required participation in concerts may include both on-campus and off-campus events. This course may be taken for a maximum of 4 times.

Transfer Credit: CSU; UC

MUS 138A
COLLEGIATE CHORALE 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
This course is designed for the student who has had some previous vocal experience. Emphasis will be placed on the development of individual musicianship through the study of musical styles, vocal concepts, and repertoire. A variety of traditional choral music ranging from the Renaissance to the twentieth century and beyond will be studied and performed with a particular emphasis on major choral works. Required participation in concerts may include both on-campus and off-campus events. This course may be taken for a maximum of 4 times.

Transfer Credit: CSU, UC

MUS 139
GOSPEL CHOIR 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
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 for a maximum of 4 times.

Transfer Credit: CSU; UC

MUS 140
POP CHOIR 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: By Audition
This course provides 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 for a maximum of 4 times.

Transfer Credit: CSU

MUS 141
POP/ROCK ENSEMBLE 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
This course provides 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 for a maximum of 4 times.

Transfer Credit: CSU

MUS 142
JAZZ IMPROVISATION 1.0 UNIT
Class hours: 1.0 Lecture/2.0 Laboratory
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 for a maximum of 4 times.

Transfer Credit: CSU; UC

MUS 143
THE JAZZ AND POPULAR SINGER 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Audition
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
MUS 144
ELECTRONIC SYNTHESIZER I    2.0 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
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 for a maximum of 2 times.
Transfer Credit: CSU

MUS 145
ELECTRONIC SYNTHESIZER II    1.0 UNIT
Class hours: 1.0 Lecture/6.0 Laboratory
Prerequisite: MUS 144 or equivalent with a grade of Pass 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 for
a maximum of 2 times.
Transfer Credit: CSU

MUS 146
RECORDING TECHNIQUES    2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Recommendation: MUS 105 or equivalent with a grade of Pass 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 for a maximum of 4 times.
Transfer Credit: CSU

MUS 147
BASIC APPLIED MUSIC    1.0 UNIT
Class hours: 1.0 Lecture/6.0 Laboratory
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 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 for a maximum of
4 units.
Transfer Credit: CSU; UC

MUS 148
PRIVATE STUDY/TECHNIQUE    1.0 UNIT
Class hours: 1.0 Lecture/6.0 Laboratory
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 for a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 149
PRIVATE STUDY/MUSICAL PREPARATION    1.0 UNIT
Class hours: 1.0 Lecture/6.0 Laboratory
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, 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 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 for a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 150
PRIVATE STUDY/PERFORMANCE PRACTICE    1.0 UNIT
Class hours: 1.0 Lecture/6.0 Laboratory
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, 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 for a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 151
PRIVATE STUDY/RECTAL PREPARATION    1.0 UNIT
Class hours: 1.0 Lecture/6.0 Laboratory
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 for a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 152
THE ART OF TEACHING BEGINNING PIANO    2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: MUS 112 and MUS 105 or equivalent with a grade of Pass or "C" or higher.
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    2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: MUS 152 or equivalent with a grade of Pass or "C" or higher.
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;
MUS 154  
PIANO ENSEMBLE  1.5 UNITS  
Class hours: 1.0 Lecture/1.5 Laboratory  
Prerequisite: MUS 112 or equivalent with a grade of Pass or "C" or higher.  
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 for a maximum of 4 times.  
Transfer Credit: CSU

MUS 160  
MARCHING BRASS ENSEMBLE  1.5 UNITS  
Class hours: 1.0 Lecture/2.0 Laboratory  
Prerequisite: Audition  
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 for a maximum of 4 times.  
Transfer Credit: CSU

MUS 161  
MARCHING PERCUSSION ENSEMBLE  1.5 UNITS  
Class hours: 1.0 Lecture/2.0 Laboratory  
Prerequisite: Audition  
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 for a maximum of 4 times.  
Transfer Credit: CSU

MUS 162  
MARCHING PAGEANTRY ENSEMBLE  1.5 UNITS  
Class hours: 1.0 Lecture/2.0 Laboratory  
Prerequisite: Audition  
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 for a maximum of 4 times.  
Transfer Credit: CSU

MUS 163  
DRUM AND BUGLE CORPS  1.5 UNITS  
Class hours: 1.0 Lecture/2.0 Laboratory  
Prerequisite: Audition  
Recommendation: MUS 160 or equivalent with a grade of Pass or "C" or higher.  
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 educators/clinicians may assist with the group, and opportunities are provided to perform learned material. This course may be taken for a maximum of 4 times.  
Transfer Credit: CSU

MUS 164  
TOURING DRUM AND BUGLE CORPS  1.5 UNITS  
Class hours: 1.0 Lecture/2.0 Laboratory  
Prerequisite: Audition  
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 for a maximum of 4 times.  
Transfer Credit: CSU

MUS 171  
OCCUPATIONAL WORK EXPERIENCE IN MUSIC  1.0 UNIT  
Class hours: 1 lecture  
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  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: MUS 144 or equivalent with a grade of Pass or "C" or higher.  
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 for a maximum of 2 times.  
Transfer Credit: CSU

MUS 298  
DIRECTED STUDIES  1.0 UNIT  
Class hours: 3.0 Independent Study  
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

MUS 299  
DIRECTED STUDIES  2.0 UNITS  
Class hours: 6.0 Independent Study  
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

NEW PRODUCT DEVELOPMENT
(Technology Division)

NPD 100
PRODUCT DEVELOPMENT IN A GLOBAL ECONOMY 3.0 UNITS
Class hours: 3.0 Lecture
This course will introduce students to product development in a global economy. Students will learn about identifying customer needs, generating specifications, selecting concepts, selecting a fabrication or procurement process, generating a prototype, and testing the product. Emphasis will be placed on the lean product development system model and how to integrate suppliers, either local or global, into the product development process.

Transfer Credit: CSU

NPD 101
INNOVATION USING RAPID PROTOTYPING 3.0 UNITS
Class hours: 3.0 Lecture
This course will introduce students to the technology of rapid prototyping used in automotive aftermarket innovations. Additive and subtractive technologies will be introduced. The focus of the class will be on performance, suspension, lighting, interior and exterior style products used in the automotive field. Students will also learn about how to import and export models from and to rapid prototyping software packages. Digital point to point and laser triangulation scanning in 3D will also be introduced in this class.

Transfer Credit: CSU

NPD 102
QUALITY SYSTEMS FOR AUTOMOTIVE INDUSTRIES ISO 16949 3.0 UNITS
Class hours: 3.0 Lecture
This course is a survey of International Standards Organization (ISO) ISO 16949, the quality standard used in automotive industries. Students will learn about the relationship of ISO 16949 with other quality systems and the importance of registration. Emphasis will be placed on how to implement the standard and recognize how auditors interpret the standard.

Transfer Credit: CSU

NPD 103
TOOLING AND MATERIALS FOR NEW PRODUCT DEVELOPMENT 3.0 UNITS
Class hours: 3.0 Lecture
This course will introduce students to the tooling and materials used in new product development. Students will learn about metallic and non-metallic materials used in the design of tooling. Emphasis will be placed on the lean development of tooling and how to integrate suppliers to reduce overall cost of product development.

Transfer Credit: CSU

NPD 104
PRODUCTIVITY IN AUTOMOTIVE AFTERMARKET MANUFACTURING 3.0 UNITS
Class hours: 3.0 Lecture
This course will introduce students to productivity issues in new product development for the automotive aftermarket. Students will learn about proper process selection used in the design of new products and tooling. Emphasis will be placed on the economic lean development of products and tooling in the automotive aftermarket.

Transfer Credit: CSU

NPD 105
ELECTRONIC SYSTEMS AND INTEGRATION IN AUTOMOTIVE AFTERMARKET 3.0 UNITS
Class hours: 3.0 Lecture
This course will introduce students to electronic systems and integration in automotive aftermarket products. Students will learn about the role of electronics in sound, light, instrumentation, wheels, security, exhaust, fuel, and emission systems. Emphasis will be placed on understanding existing vehicle systems and how to integrate newly designed components.

Transfer Credit: CSU

NURSING
(Health Occupations Division)

NRSG 3 (Not Degree Applicable)
PREPARING FOR NURSING 2.0 UNITS
Class hours: 2.0 Lecture
This course is designed to facilitate the success of students pursuing entry into a nursing program who did not reach the benchmark score on the diagnostic assessment test. The aim of the course is to aid students in identifying and strengthening areas needed in academic preparation for a nursing program, as well as to develop critical thinking and study skills essential to success. Resources available to facilitate student success will be identified and explored. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 3 times.

NRSG 5 (Not Degree Applicable)
REMOVING BARRIERS TO SUCCESS IN NURSING 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: Achievement of a score below benchmark on the diagnostic assessment test. This course is designed to facilitate the success of students pursuing entry into a nursing program. 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.

NRSG 25 (Not Degree Applicable)
CLINICAL WORKSHOP 1 0.5 UNIT
Class hours: 0.3 Lecture/1.8 Laboratory
Prerequisite: Current license as a License Psychiatric Technician or Licensed Vocational Nurse or completion of one or more nursing core course in an approved/accredited nursing program. 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 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 for a maximum of 3 times.

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NRSG 26 (Not Degree Applicable)
CLINICAL WORKSHOP 2   0.5 UNIT
Class hours: 0.3 Lecture/1.8 Laboratory
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.

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 for a maximum of 3 times.

NRSG 48T (Not Degree Applicable)
ELECTIVE NURSING - TUTORIAL  0.5 UNIT
Class hours: 2.0 Laboratory
Prerequisite: Admission to the Nursing Program.

This course is designed as an elective course to facilitate the development of nursing skills that are taught in the Nursing Program. This course is also designed to assist students who need time to practice nursing skills to achieve mastery in performance in a supervised lab setting through individualized and mediated instruction. It is open to students in continuous enrollment, readmitted, or transferring into the Nursing Program. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 4 times.

NRSG 80 (Not Degree Applicable)
NURSING PROCESS DOCUMENTATION   1.0 UNIT
Class hours: 1.0 Lecture/0.5 Laboratory
Prerequisite: NRSG 210 or equivalent with a grade of Pass or “C” or higher or admission to the Nursing Program.

The focus of this course is on the documentation of the physical and psychosocial assessment of patients utilizing the Nursing Process. Emphasis is also placed on the recording and recording of assessment findings using appropriate medical terminology applicable to the clinical nursing setting. This course may be taken a maximum of 3 times.

NRSG 200
PHARMACOLOGY FOR NURSES   2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: A&P 150 and A&P 151 or equivalent with grades of Pass 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     5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Prerequisite: Admission to Nursing Program.
Corequisite: NRSG 211 and NRSG 213A

The focus of this course is on the introduction of theory and beginning clinical application of the Nursing Process and the Roy Adaptation Model when providing 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 adult physical assessment skills and fundamental concepts and skills required for patient care. Students are evaluated using the Educational Competencies for Graduates of Associate Degree Nursing Programs as identified by the National League for Nursing Task Force. 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

NRSG 211
INTRODUCTION TO THEORETICAL FRAMEWORK   1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: Admission to the Nursing Program or possession of an active Licensed Psychiatric Technician License.

This course introduces beginning nursing students and Licensed Psychiatric Technicians to the theoretical framework used in the Cerritos College Nursing Program. The Nursing Process as a dynamic, systematic way of delivering patient care is defined and demonstrated. Students are introduced to concepts central to nursing theory and elements of the Roy Adaptation Model. Students learn to integrate the Nursing Process and Roy Adaptation Model into clinical nursing practice when planning and providing patient care. The student must receive a grade of Credit or “C” or higher to pass this course.

Transfer Credit: CSU

NRSG 212
MEDICAL-SURGICAL NURSING I    5.0 UNITS
Class hours: 2.5 Lecture/7.5 Laboratory
Prerequisite: NRSG 210 or equivalent with a grade of Pass or “C” or higher. For Option B students: Possession of an active Licensed Psychiatric Technician license and admission to the Nursing Program.
Corequisite: NRSG 211 may be taken prior to admission or concurrent recommendation: NRSG 213A or NRSG 200 or equivalent with a grade of Pass or “C” or higher.

The focus of this course is on the theory and clinical application of the Nursing Process based on the Roy Adaptation Model when providing care for acutely ill medical-surgical patients with specific conditions. Adult physical assessment skills continue to be applied to patients in an acute care setting. 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 213A
MAJOR DRUGS AND NURSING MANAGEMENT I  0.5 UNIT
Class hours: 0.5 Lecture
Prerequisite: Admission to the Nursing Program.

This course introduces the student 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. (Formerly NRSG 213)

Transfer Credit: CSU

NRSG 213B
MAJOR DRUGS AND NURSING MANAGEMENT II   1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: NRSG 213A or equivalent with a grade of Pass or “C” or higher.

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

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Announcement of Courses

NRSG 215
ADVANCED PLACEMENT
BRIDGE 1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: 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 Pass or "C" or higher.
Recommendation: Completion of READ 54, ENGL 52, and MATH 60 or equivalent with grades of Pass or "C" or higher or successful completion of the college placement
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 5.5 UNITS
Class hours: 3.0 Lecture/7.5 Laboratory
Prerequisite: NRSG 211 and NRSG 212 and NRSG 213A or equivalent with grades of Pass or "C" or higher. For Option B and E students: Admission to the Nursing Program.
Corequisite: NRSG 213B.
The focus of this course is on the theory and clinical application of the Nursing Process based on the Roy Adaptation Model when providing care for medical-surgical patients and patients with women's health disorders in acute care settings. The role of the nurse as a manager of care in collaboration with other members of the healthcare team 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 230
PSYCHOSOCIAL AND COMMUNITY NURSING 5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Prerequisite: NRSG 222 or equivalent with a grade of Pass 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 when caring for clients in psychiatric and community-based settings. 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 232
MEDICAL-SURGICAL NURSING 4 5.0 UNITS
Class hours: 2.5 Lecture/7.5 Laboratory
Prerequisite: NRSG 230 or equivalent with a grade of Pass 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 clinical application of the Nursing Process and the Roy Adaptation Model when providing care for patients with complex medical-surgical conditions in acute care settings. Continued emphasis is placed on the role of the nurse as a manager of care in collaboration with other members of the healthcare team. 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 5.0 UNITS
Class hours: 2.5 Lecture/7.5 Laboratory
Prerequisite: NRSG 232 or equivalent with a grade of Pass 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 and the Roy Adaptation Model when providing care for patients with increasingly complex medical-surgical conditions in acute care settings and exposure to specialty care areas. The role of the nurse as a manager of care continues to be emphasized with increased focus on organization, leadership, and delegation skills. 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 courses.
Transfer Credit: CSU

NRSG 242
PROFESSIONAL ROLE TRANSITION 3.0 UNITS
Class hours: 0.5 Lecture/7.7 Laboratory
Prerequisite: NRSG 240 or equivalent with a grade of Pass or "C" or higher.
The focus of this course is on the theory and clinical application of the Nursing Process when providing care for medical-surgical patients in the acute care setting. This course facilitates the transition from student nurse to graduate nurse. The student participates as a preceptor member of the healthcare team and assumes responsibility for a group of patients under the direct supervision of a registered nurse. Course content includes legal and ethical issues related to nursing practice. By the end of this course, the graduate is expected to function satisfactorily within the Educational Competencies for Graduates of Associate Degree Nursing Programs as identified by the National League for Nursing Task Force. 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 251
BASIC ADULT PHYSICAL ASSESSMENT 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
Prerequisite: Current or prior enrollment in an accredited nursing program or licensure as a health care provider.
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

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PHARMACY CLERK

CLINICAL EXPERIENCE 2.0 UNITS
Class hours: 0.3 Lecture/6.8 Laboratory
Prerequisite: PHAR 45, PHAR 60, and PHAR 60L or equivalent with grades of Pass or "C" or higher.
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.

PHARMACY OPERATIONS I 0.5 UNIT
Class hours: 0.7 Lecture/0.3 Laboratory
Prerequisite: PHAR 60 or equivalent with a grade of Pass or "C" or higher.
This course is designed for the Pharmacy Technician major to develop proficiency in skills necessary to both hospital and community pharmacy settings. It will also introduce students to the many contemporary issues facing the pharmacy profession. Included will be use of forms, drug formularies, patient profiles, patient charts, processing of medication orders, drug manufacturing and packaging, and computers.

PHARMACY OPERATIONS II 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: PHAR 62 with grade of Credit or "C" or higher.
Recommendation: Verification of typing proficiency at 30 wpm or BCOT 135 or equivalent with a grade of Credit or "C" or higher.
This course is designed for the Pharmacy Technician major to develop proficiency in skills necessary to both hospital and community pharmacy settings. It will also introduce students to the many contemporary issues facing the pharmacy profession. Included will be use of forms, drug formularies, patient profiles, patient charts, processing of medication orders, drug manufacturing and packaging, and computers.

PHARMACY TECHNICIAN

RETAIL PRODUCTS FOR PHARMACY CLERKS 2.0 UNITS
Class hours: 2.0 Lecture
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 45

PHARMACY CLERK

PHARMACY OPERATIONS I 0.5 UNIT
Class hours: 0.7 Lecture/0.3 Laboratory
Prerequisite: PHAR 60 or equivalent with a grade of Pass or "C" or higher.
This course is designed for the student to develop those skills necessary to work in a setting dealing with patients, pharmacists, and co-workers in an inpatient setting. The student will develop an understanding of hospital distribution systems, medication order transcription and interpretation of various sections of a patient’s profile.

PHARMACY OPERATIONS II 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: PHAR 62 with grade of Credit or "C" or higher.
Recommendation: Verification of typing proficiency at 30 wpm or BCOT 135 or equivalent with a grade of Credit or "C" or higher.
This course is designed for the Pharmacy Technician major to develop proficiency in skills necessary to both hospital and community pharmacy settings. It will also introduce students to the many contemporary issues facing the pharmacy profession. Included will be use of forms, drug formularies, patient profiles, patient charts, processing of medication orders, drug manufacturing and packaging, and computers.

PHARMACY TECHNICIAN

RETAIL PRODUCTS FOR PHARMACY CLERKS 2.0 UNITS
Class hours: 2.0 Lecture
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 45

PHARMACY CLERK

CLINICAL EXPERIENCE 2.0 UNITS
Class hours: 0.3 Lecture/6.8 Laboratory
Prerequisite: PHAR 45, PHAR 60, and PHAR 60L or equivalent with grades of Pass or "C" or higher.
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 Pass or "C" or higher.
This course is designed to develop the practical application of fundamentals of measurements and mathematics utilized by the pharmacy technician.

PHAR 60

PHARMACY INTRODUCTION 2.0 UNITS
Class hours: 2.0 Lecture
Corequisite: PHAR 60L
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.

PHAR 60L

PHARMACY SKILLS LAB INTRODUCTION 1.0 UNIT
Class hours: 0.7 Lecture/1.3 Laboratory
Corequisite: PHAR 60
This course is designed to provide the student with hands-on experience working with a computerized Pharmacy Management System in the retail setting. (Formerly PHAR 40L)

PHAR 62

PHARMACY OPERATIONS I 0.5 UNIT
Class hours: 0.7 Lecture/0.3 Laboratory
Prerequisite: PHAR 60 or equivalent with a grade of Pass or "C" or higher.
This course is designed for the student to develop those skills necessary to work in a setting dealing with patients, pharmacists, and co-workers in an inpatient setting. The student will develop an understanding of hospital distribution systems, medication order transcription and interpretation of various sections of a patient’s profile.
PHAR 74
PHARMACY TECHNICIAN
OCCUPATIONAL WORK
EXPERIENCE    4.0 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week for Pharmacy Technician work experience 73 or 20 hours of employment per week for Pharmacy Technician work experience 74. The employment must be in a job related to the student's educational goal.
Corequisite: Enrollment in the Pharmacy Technology 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 repeated for a maximum of 2 times based on the number of hours on the job. (Formerly PHAR 173/174)

PHAR 81
OVER-THE-COUNTER PRODUCTS    3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: MA 161 or A&P 120 or equivalent with a grade of Pass or "C" or higher.
This course provides knowledge about Over-the-Counter (OTC) products in relation to their classification and general actions to help a person select a non-prescription drug safely and rationally.

PHAR 83
PHARMACY TECHNICIAN
PHARMACOLOGY I    3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: MA 161 or A&P 120 or equivalent with a grade of Pass or "C" or higher.
This pharmacology course covers information on drugs affecting the respiratory, integumentary, nervous and cardiovascular systems. Content includes major indications for drug use, how drugs exert their effects, adverse effects and specific implications for consumer awareness. Drugs of abuse, at-risk populations and treatment regimens are included. Emphasis will be on routes of administration and product types.

PHAR 90
CLINICAL EXPERIENCE I    3.0 UNITS
Class hours: 1.0 Lecture/6.7 Laboratory
Prerequisite: PHAR 50, PHAR 63, and PHAR 81 or equivalent with grades of Pass or "C" or higher. Verification of negative chest x-ray or non-reactive T.B. skin test within the last year.
This course is designed to provide the student with practical experiences in selected outpatient community pharmacy settings working under the supervision of a registered pharmacist.

PHAR 95
CLINICAL EXPERIENCE II    5.0 UNITS
Class hours: 1.0 Lecture/11.1 Laboratory
Prerequisite: PHAR 64, PHAR 83, and PHAR 85 or equivalent with grades of Pass or "C" or higher.
This course is designed to provide the student with practical experiences in the classroom lab and in selected hospital pharmacy settings working with intravenous additives and sterile extemporaneous packaging areas.

PHAR 98
DIRECTED STUDIES    1.0 UNIT
Class hours: 3.0 Independent Study
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.

PHAR 99
DIRECTED STUDIES    2.0 UNITS
Class hours: 6.0 Independent Study
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.

PHILOSOPHY

(Canada, Social Science Division)

PHIL 100
INTRODUCTION TO PHILOSOPHY    3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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

PHIL 102
INTRODUCTION TO ETHICS    3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This course represents a survey of the major theories of value in the writings of some prominent philosophies of Western culture and the Asian tradition, with special attention to a critical evaluation of their relevance to educational, ethical, esthetic, religious, and social problems of our times.
Transfer Credit: CSU; UC

PHIL 103
PHILOSOPHICAL Reasoning: CRITICAL THINKING IN PHILOSOPHY    3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher or a satisfactory completion of the Advanced Placement
This course presents a comparative study of the major religions of the world including Christianity, Islam, etc. The survey pertains to the major philosophical movements that characterize the twentieth century, including the rise of Continental, Anglo-American, Marxist, Feminist, 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

INTRODUCTION TO TWENTIETH CENTURY PHILOSOPHY

Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.

Recommendation: Satisfactory completion of READ 42 or equivalent with a grade of Pass 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 203

PHILOSOPHY OF THE BIBLE I (HEBREW SCRIPTURES)

Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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)

Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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
processing, darkroom and computer techniques, lighting, and composition.  

Transfer Credit: CSU; UC

PHOT 102  
INTERMEDIATE  
PHOTOGRAPHY  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: PHOT 100 or equivalent with a grade of Pass or "C" or higher.  
This 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  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
This course provides an introduction to the basics of digital photography. Topics include use of digital cameras; scanning techniques; file compression and formatting; use of image editing software (primarily Adobe Photoshop); 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 112  
INTERMEDIATE  
DIGITAL PHOTOGRAPHY  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: PHOT 110 or ART 192 or equivalent with a grade of Pass or "C" or higher.  
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  
COLOR PHOTOGRAPHY  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: PHOT 100 or equivalent with a grade of Pass or "C" or higher.  
This course provides instruction in the practical and theoretical principles of color photography. The student will examine choices in film, scanning, digital capture, and digital output. Image evaluation will include technical considerations of light, exposure, color correction, computer monitor calibration, and color profiles for printing. Furthermore, color and vision, color theory, and color symbolism will be examined at length. Specific assignments will be addressed with individual and class critiques.  
Transfer Credit: CSU

PHOT 130  
PHOTO JOURNALISM  3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: PHOT 100 or equivalent with a grade of Pass or "C" or higher.  
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 must have access to a 35mm camera.  
This course is not open to students who are enrolled in or who have received credit in JOUR 130.  
Transfer Credit: CSU

PHOT 160  
HISTORY OF PHOTOGRAPHY  3.0 UNITS  
Class hours: 3.0 Lecture  
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 form 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 170  
PORTRAIT PHOTOGRAPHY  3.0 UNITS  
Class hours: 1 lecture  
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  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: PHOT 102 or equivalent with a grade of Pass or "C" or higher, or a combination of PHOT 100 and PHOT 110 or equivalent with grades of Pass or "C" or higher.  
This course is designed to advance student's knowledge and skills beyond Intermediate Photography.  
This course will cover advanced large format camera usage, studio strobe lighting techniques, digital photography, and professional presentation of photographs.  
At the end of the semester, student will be excepted to present 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 230  
PORTRAIT PHOTOGRAPHY  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: PHOT 100 or equivalent with a grade of Pass 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, figurative portraiture, directoral portraiture, and fashion. Issues regarding idolatry, gender and sexuality, "the gaze," ethics, exploitation, and legal questions will be explored.  
Transfer Credit: CSU

Announcement of Courses
PHOT 232
APPROACHES TO
STUDIO LIGHTING    3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: PHOT 100 or equivalent with a grade of Pass or "C" or higher.
This course examines a variety of approaches to studio lighting in photography. Concept development and execution in the studio environment as well as studio 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    3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: PHOT 102 or equivalent with a grade of Pass or "C" or higher, or a combination of PHOT 100 and PHOT 110 or equivalent with grades of Pass or "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    3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: PHOT 100 or equivalent with a grade of Pass or "C" or higher.
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 cameraless photography, photomontage, chance 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    3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: PHOT 100 or equivalent with a grade of Pass 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    3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: PHOT 100 or equivalent with a grade of Pass 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    3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: PHOT 100 or equivalent with a grade of Pass 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

PHOT 259
DIRECTED STUDIES    1.0 UNIT
Class hours: 3.0 Independent Study
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

PHYSICAL EDUCATION
(Health, Physical Education Division)

PE 100
INTRODUCTION TO PHYSICAL EDUCATION AND SPORT    2.0 UNITS
Class hours: 2.0 Lecture
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#
SPORT OFFICIATING FOR FOOTBALL    1.0 UNIT
Class hours: 1.0 Lecture
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.
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. This course is not open to students who are enrolled in or who have received credit in WS 106.

Transfer Credit: CSU; UC

**PE 107**
INTRODUCTION TO ATHLETIC TRAINING 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
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 2.0 UNITS
Class hours: 2.0 Lecture
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 2.0 UNITS
Class hours: 2.0 Lecture
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 112#**
THEORY OF FOOTBALL 2.0 UNITS
Class hours: 2.0 Lecture
This course gives students an understanding of how to coach and teach the skills, principles, and philosophy of offensive and defensive 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 113#**
PROFESSIONAL ACTIVITIES FOR CO-ED SPORTS I 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
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 120##**
SEDENTARY ACTIVITIES FOR STUDENT’S WITH DISABILITIES 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 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 121###**
ADAPTED CARDIOVASCULAR EXERCISE 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
Recommendation: Completed adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, intake interview assessment procedure.

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All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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 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 122##**
**ADAPTED STRENGTH TRAINING** 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 123##**
**ADAPTED SWIMMING** 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 124##**
**WHEELCHAIR ACTIVITIES** 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 125**
**WATER SAFETY INSTRUCTOR (WSI)** 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
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 for a maximum of 4 times.
Transfer Credit: CSU; UC

**PE 126**
**LIFEGUARD TRAINING** 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: PE 150A, swimming, beginning or equivalent with a grade of Pass or "C" or higher.
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) certification "Lifeguard Training and Community First Aide and Safety." This course may be taken for a maximum of 4 times.
Transfer Credit: CSU; UC

**PE 130##**
**STRETCHING AND RELAXATION** 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 for a maximum of 4 units. (Formerly PE 30.2)
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** 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 132##**
**LOW IMPACT AEROBICS** 1.5 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
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 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 133##**
**AEROBIC ACTIVITIES** 1.5 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
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 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.
Announcement of Courses

PE 133##
STEP AEROBICS  1.5 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
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 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 134##
WATER AEROBICS  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This water aerobics exercise class emphasizes development of cardiorespiratory endurance, flexibility and muscle tone. No swimming skills are required. This course 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 135A##
CIRCUIT WEIGHT TRAINING BEGINNING  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 for 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 135B##
CIRCUIT WEIGHT TRAINING, INTERMEDIATE/ADVANCED  2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 for 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  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
Students will receive practical instruction in ways to improve their cardiopulmonary endurance, muscular endurance, flexibility, and body composition through indoor bicycling. Basic drills and intensity training will be included. Lectures may include. Lectures may include the areas of basic nutrition, body composition, posture analysis, and principles of safe and effective exercise on an indoor bike. This course 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 137##
SONG UNIT  2.0 UNITS
Class hours: 6.0 Laboratory
This course is designed to develop, improve and implement the skills necessary to be an effective songleader at the community college level. This course 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 138##
YOGA  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 139##
PILATES CONDITIONING  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 141##
FITNESS AND WELLNESS  3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
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 for 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  2.0 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
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 for 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  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 for a maximum of 4 times.

*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 2.0 UNITS

Class hours: 1.0 Lecture/2.0 Laboratory

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 1.0 UNIT

Class hours: 0.5 Lecture/1.5 Laboratory

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 1.0 UNIT

Class hours: 0.5 Lecture/1.5 Laboratory

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 for a maximum of 4 times.

Transfer Credit: CSU, UC*

*UC credit limits may apply. Any or all these PE courses with ##'s combined; maximum credit, 4 times.

PE 147##

TRIATHLON BASICS 1.0 UNIT

Class hours: 0.5 Lecture/2.5 Laboratory

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 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 148##

BODY SCULPTING 1.0 UNIT

Class hours: 0.5 Lecture/1.5 Laboratory

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 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 149A##

BEGINNING JOGGING FOR FITNESS 1.0 UNIT

Class hours: 0.5 Lecture/1.5 Laboratory

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 for 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 JOG FOR FITNESS 2.0 UNITS

Class hours: 1.0 Lecture/3.0 Laboratory

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 for 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 150##

SWIMMING, INTERMEDIATE /ADVANCED 2.0 UNITS

Class hours: 1.0 Lecture/3.0 Laboratory

Intensive drill in backstroke, sidestroke, breaststroke and crawl. Fundamentals of diving and water polo. This course may be taken for 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 1.0 UNIT

Class hours: 0.5 Lecture/1.5 Laboratory

This course is designed to provide instruction and practice in the fundamentals of wrestling. This course 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 153##

BACKPACKING BEGINNING 2.0 UNITS

Class hours: 1.0 Lecture/3.0 Laboratory

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 for 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.
Announcement of Courses

PE 153B##
BACKPACKING ADVANCED 2.0 UNITS
Class hours: 1.0 Lecture/6.0 Laboratory
Prerequisite: PE 153A or equivalent with a grade of Pass 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 for 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, BEGINNING 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
Emphasis will be on fundamental strokes and court techniques for singles, doubles, and mixed doubles. This course may be taken for 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 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
The fundamental theory, techniques, rules, etiquette and scoring of bowling will be emphasized. This course may be taken for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 156A##
GOLF BEGINNING 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This course is designed to teach fundamental techniques of grip, alignment, stance and swing for irons, woods, and putting. This course may be taken for 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 156B##
GOLF INTERMEDIATE/ADVANCED 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course provides group and individualized instruction to develop and improve the more technical and advanced golf strokes. Specialized strokes include those used in sand traps, side hill and down hill lies, tee shots, and advanced putting techniques. Golf playing strategy for use on the course will be presented. Professional Golf Association (PGA) rules and etiquette will be emphasized. Students will play competitive golf in class. This course may be taken for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 for 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 159B##
TENNIS INTERMEDIATE/ADVANCED 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
A course designed to provide women with specific attitudes, knowledge and skills useful in self-defense. This course 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.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

PE 170##
WATER POLO 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 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 171A##
SOFTBALL 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This course is designed to provide students
with the knowledge and practical skills
necessary to effectively participate in softball.
This course may be taken for 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 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This course is designed to develop the students’
understanding of the basic fundamentals
of volleyball by instruction and practice in
setting, passing, hitting and team play. This
course may be taken for 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 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 for 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 175A##
BASEBALL BEGINNING 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This course is designed to teach individual
techniques of offense and defense in baseball. It
can 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 175B##
BASEBALL INTERMEDIATE/
ADVANCED 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This course will include instruction and
practice in shooting, passing, offensive play,
individual and team defense. This course may
be taken for 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 176B##
BASKETBALL, ADVANCED 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Team competitive play situations will be
provided in order to increase students’ skills,
knowledge, and strategy. This course may be
taken for 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 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This course is designed to teach the
fundamental theory and skills involved in the
game of flag football. This course 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 178##
FOOTBALL INTERMEDIATE/
ADVANCED 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 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.

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PE 179A#
SOCCR BEGINNING  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This class is designed to introduce theory and practice in the fundamental skills and techniques of soccer. Proper conditioning will be stressed. This course may be taken for 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 179B#
SOCCR INTERMEDIATE/ADVANCED  2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 for 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 200#
BASEBALL  3.0 UNITS
Class hours: 10.0 Laboratory
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 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 201#
BASEBALL OFF-SEASON CONDITIONING  2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course is designed to provide the physical training and preparation to become a competitive baseball athlete. Muscular balance for position specific needs is attained through principles ranging from interval training to resistance training. This course will improve strength, flexibility, endurance and agility. This course 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 202#
BASKETBALL, MEN  3.0 UNITS
Class hours: 10.0 Laboratory
Training for intercollegiate competition in Basketball. This course 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 204#
BASKETBALL, WOMEN  3.0 UNITS
Class hours: 10.0 Laboratory
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 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 206#
CROSS COUNTRY, MEN  3.0 UNITS
Class hours: 10.0 Laboratory
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 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 207#
CROSS COUNTRY CONDITIONING  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This course presents techniques for cross-country preseason conditioning and training. This course 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 208#
CROSS COUNTRY, WOMEN  3.0 UNITS
Class hours: 10.0 Laboratory
This course is designed to provide training for women in intercollegiate competition in cross-country. This course 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 210#
FOOTBALL, MEN  3.0 UNITS
Class hours: 10.0 Laboratory
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 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 211#
FOOTBALL CONDITIONING (OLYMPIC WEIGHTS - POWER LIFTING)  2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 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 212#
FOOTBALL TRAINING AND TECHNIQUES  2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 for a maximum of 2 times.
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  3.0 UNITS
Class hours: 10.0 Laboratory
This class prepares students for intercollegiate competition in golf and gives them an opportunity to participate in this competition.
This course 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 217##**
**SOCCER, MEN** 3.0 UNITS
Class hours: 10.0 Laboratory
Training for intercollegiate competition in soccer. This course 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 219##**
**SOCCER, WOMEN** 3.0 UNITS
Class hours: 10.0 Laboratory
Training for intercollegiate competition in women’s soccer. This course 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 221##**
**SOFTBALL, WOMEN** 3.0 UNITS
Class hours: 10.0 Laboratory
Training for intercollegiate competition in women’s softball. This course 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 222##**
**SOFTBALL PRE-SEASON CONDITIONING** 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 223##**
**SWIMMING, MEN** 3.0 UNITS
Class hours: 10.0 Laboratory
Training for intercollegiate competition in swimming. This course 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 225##**
**SWIMMING, WOMEN** 3.0 UNITS
Class hours: 10.0 Laboratory
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 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 227##**
**TENNIS, MEN** 3.0 UNITS
Class hours: 10.0 Laboratory
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 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 228##**
**TENNIS CONDITIONING** 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 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 229##**
**TENNIS, WOMEN** 3.0 UNITS
Class hours: 10.0 Laboratory
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 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 231##**
**TRACK AND FIELD, MEN** 3.0 UNITS
Class hours: 10.0 Laboratory
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 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 233##**
**TRACK AND FIELD, WOMEN** 3.0 UNITS
Class hours: 10.0 Laboratory
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 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 231##**
**TRACK AND FIELD CONDITIONING** 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
The techniques and training of track and field events are combined in a preseason conditioning program during the fall of the year. This course 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 235##**
**VOLLEYBALL, WOMEN** 3.0 UNITS
Class hours: 10.0 Laboratory
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 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 236## VOLLEYBALL PRESEASON CONDITIONING 1.0 UNIT**
Class hours: 0.5 Lecture/1.5 Laboratory
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 repeated 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 238## WRESTLING OFF SEASON TRAINING 2.0 UNITS**
Class hours: 1.0 Lecture/3.0 Laboratory
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 repeated 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 239## WATER POLO MEN 3.0 UNITS**
Class hours: 10.0 Laboratory
Training for intercollegiate competition in water polo. This course 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 241## WATER POLO WOMEN 3.0 UNITS**
Class hours: 10.0 Laboratory
Training for intercollegiate competition in water polo. This course 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 243## WRESTLING 3.0 UNITS**
Class hours: 10.0 Laboratory
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 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 245## PEP UNIT 2.0 UNITS**
Class hours: 6.0 Laboratory
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 for a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE course ##’s combined; maximum credit, 4 units.

**PE 253## SPORTS PSYCHOLOGY 3.0 UNITS**
Class hours: 3.0 Lecture
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 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 3.0 UNITS**
Class hours: 2.5 Lecture/2.0 Laboratory
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 3.0 UNITS**
Class hours: 3.0 Lecture
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 2.0 UNITS**
Class hours: 1.0 Lecture/3.0 Laboratory
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 ATHLETIC INJURY TAPING, BANDAGING AND IMMobilIZATION 1.0 UNIT**
Class hours: 0.5 Lecture/1.5 Laboratory
This course allows the student to expand upon the knowledge and skill of management, bandaging, and taping of athletic injuries. Emphasis is placed on immobilization of acute injuries, and the techniques used for preventative bandaging and taping of athletic injuries.
Transfer Credit: CSU

**PE 265 LEADERSHIP: THEORY & PRACTICE FOR THE FITNESS PROFESSIONAL 3.0 UNITS**
Class hours: 3.0 Lecture
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
Announcement of Courses

PE 271A
OCCUPATIONAL WORK
EXPERIENCE ATHLETIC 1.0 UNIT
Class hours: 1 lecture
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.
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 1.0 UNIT
Class hours: 1 lecture
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 the 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 project is completed. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

PE 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

PE 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

PHYSICAL SCIENCE
(Science, Engineering, Mathematics Division)

PS 100
PHYSICAL SCIENCE OF MODERN TECHNOLOGY 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: MATH 40 or equivalent with a grade of Pass or "C" or higher or satisfactory completion of 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; UC*
*UC credit limits may apply. No credit for PS 100 if taken after a college course in Astronomy, Chemistry, Geology or Physics.

PS 112
PHYSICAL SCIENCE FOR ELEMENTARY SCHOOL TEACHERS 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: MATH 105 or MATH 110A or concurrent enrollment or equivalent with a grade of Pass or "C" or higher, or satisfactory completion of the Math Placement Process.
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

PHYSICAL THERAPIST ASSISTANT
(Health Occupations Division)

PTA 100
PREPARING FOR CAREERS IN PHYSICAL THERAPY 3.0 UNITS
Class hours: 3.0 Lecture
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
INTRODUCTION TO PHYSICAL THERAPY 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
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
PTA 120
KINESIOLOGY  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: A&P 150 and A&P 151 or equivalent with grades of Pass or "C" or higher.
This course is the study of biomechanical principles of human movement and locomotion including specific kinesiological functions of muscles and muscle groups, characteristics of normal posture and gait, and an introduction to the clinical manifestations of muscle dysfunction. Laboratory hours will be used for goniometry, gait observation, muscle action application, and practice.
Transfer Credit: CSU

PTA 125
PATHOLOGY  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: PTA 110 or equivalent with a grade of Pass or "C" or higher.
This course will include introduction to and 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 126
CLINICAL PRACTICUM I  4.0 UNITS
Class hours: 12.3 Laboratory
Prerequisite: PTA 110 with a grade of Pass or "C" or higher
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  2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: PTA 120 or equivalent with a grade of Pass or "C" or higher.
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  3.0 UNITS
Class hours: 3.0 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 through adulthood. Emphasis will be placed on neurodevelopmental techniques used for abnormal development and for patients with neurological or musculoskeletal disorders 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.
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  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: PTA 120 or equivalent with a grade of Pass 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 identification 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  2.0 UNITS
Class hours: 2.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: PTA 120 or equivalent with a grade of Pass 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  4.0 UNITS
Class hours: 12.3 Laboratory
Prerequisite: PTA 125 or equivalent with a grade of Pass or "C" or higher.
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  2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: PTA 230 or equivalent with a grade of Pass or "C" or higher.
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, job site measurement and professional presentations.
Transfer Credit: CSU

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
PTA 245
ADVANCED MODALITIES  3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: PTA 235 or equivalent with a grade of Pass 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  4.0 UNITS
Class hours: 12.3 Laboratory
Prerequisite: PTA 235 or equivalent with a grade of Pass or "C" or higher.
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

PTA 298
DIRECTED STUDIES  1.0 UNIT
Class hours: 3.0 Independent Study
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

PTA 299
DIRECTED STUDIES  2.0 UNITS
Class hours: 6.0 Independent Study
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

PHYSICS
(Science, Engineering, Mathematics Division)

PHYS 50
PRINCIPLES OF TECHNOLOGY  3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: PHYS 201 or equivalent with a grade of Pass or "C" or higher.
This course emphasizes the physics of modern technology and its applications in the 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.)
Transfer Credit: CSU; UC*

PHYS 100
ELEMENTARY PHYSICS  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: MATH 140 or equivalent with a grade of Pass 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*

PHYS 101
(CAN PHYS 2) (CAN PHYS SEQ A)
GENERAL PHYSICS  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: MATH 140 or equivalent with a grade of Pass 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*

PHYS 102
(CAN PHYS 4) (CAN PHYS SEQ A)
GENERAL PHYSICS  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: PHYS 101 or equivalent with a grade of Pass 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*

PHYS 201
(CAN PHYS 8) (CAN PHYS SEQ C)
ENGINEERING PHYSICS  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: PHYS 100, or PHYS 101, and MATH 170 or equivalent with grades of Pass 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*

PHYS 202
(CAN PHYS 12) (CAN PHYS SEQ B)
ENGINEERING PHYSICS  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: PHYS 201 or equivalent with a grade of Pass 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*

PHYS 203
(CAN PHYS 14) (CAN PHYS SEQ B)
ENGINEERING PHYSICS  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: PHYS 201 or equivalent with a grade of Pass 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

PHYS 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

PHYS 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

Announcement of Courses

PLASTICS/COMPOSITES
MANUFACTURING TECHNOLOGY
(Technology Division)

PMT 1 (Not Degree Applicable)
PLASTICS FUNDAMENTALS 1.5 UNITS
Class hours: 1.5 Lecture
This course provides students with a basic understanding of occupations, manufacturing processes, and materials used within 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 areas of interest within the plastics manufacturing industry.

PMT 2 (Not Degree Applicable)
INJECTION MOLDING FUNDAMENTALS 1.5 UNITS
Class hours: 1.0 Lecture/1.5 Laboratory
This course introduces students to the fundamentals of set-up and operation of injection molding equipment in the plastics industry. Safe handling of select machine operations and applied training utilizing current industry equipment is emphasized. Students receiving this training will be able to apply for entry-level positions in the plastics industry. This course may be taken a maximum of 2 times.

PMT 3 (Not Degree Applicable)
PLASTICS REPAIR 1.0 UNIT
Class hours: 1.0 Lecture
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 63L specialty lab class is recommended to perform the hands-on training and repairs.

PMT 4
PLASTICS FABRICATION 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
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
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/0.5 Laboratory
This survey course introduces students to the fundamentals of the plastic extrusion process. Selection of equipment and materials are covered as well as current industry terminology. Material handling, safe machine operation and manufacturing processes are emphasized.

PMT 43 (Not Degree Applicable)
PLASTICS MANUFACTURING TECHNOLOGY OCCUPATIONAL WORK EXPERIENCE 3.0 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 44 (Not Degree Applicable)
PLASTICS MANUFACTURING TECHNOLOGY OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS
Class hours: One (1) hour control class each week plus 15 hours of employment per week
Announcement of Courses

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/0.5 Laboratory
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: 2.0 Lecture/2.0 Laboratory
Recommendation: PMT 70 or equivalent with a grade of Pass 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 52
MOLD REPAIR AND MAINTENANCE 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
This course is designed to further extend both the students’ skills in plastic injection moldmaking and knowledge of the latest technologies used for mold designing and mold fabrication, including the use of computer programs. Definitions of complex types of plastic injection molds, mathematical solutions of plastic part requirements, computer-generated Electrical Discharge Machining (EDM) electrodes and computer-generated template designs, and surface polishing will be covered.

PMT 53
COMPOSITES REPAIR 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: PMT 70 or equivalent with a grade of Pass or “C” or higher, or appropriate work experience.
This course provides students with “hands-on” exposure to composite structural repair techniques. Areas of emphasis include structural and nonstructural (cosmetic) evaluation, material handling, surface preparation, and common types of damages encountered within the composite industry.

PMT 55
PROTOTYPING 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
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
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: 2.0 Lecture/2.0 Laboratory
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: 2.0 Lecture/2.0 Laboratory
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 equipment handling is stressed. This course may be taken a maximum of 2 times.

PMT 60
EXTRUSION 3.0 UNITS
Class hours: 2.5 Lecture/1.5 Laboratory
Recommendation: PMT 100 or equivalent with a grade of Pass 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: 2.0 Lecture/2.0 Laboratory
Recommendation: PMT 100 or equivalent with a grade of Pass 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 laminating, repair, and proper use of resins and fillers. Mixing of resins and safety procedures are emphasized. This course may be taken for a maximum of 2 times.

PMT 62
PLASTIC PACKAGING 2.0 UNITS
Class hours: 2.0 Lecture
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 Laboratory
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 for a maximum of 4 times.

PMT 64
PLASTICS PRODUCTION 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
This is an intermediate course designed to

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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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** 3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
This class introduces student to the fundamentals of plastic injection mold designs and fabrication. This course will includes basic shop operation, demonstrations, safety and technology of moldmaking in the plastic industry.

**PMT 66 HYDRAULICS AND PNEUMATICS** 3.0 UNITS  
Class hours: 2.5 Lecture/1.5 Laboratory  
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: 2.0 Lecture/2.0 Laboratory  
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 or her own with instructor approval.

**PMT 68 PLASTIC MATERIALS AND PROCESS** 2.5 UNITS  
Class hours: 2.0 Lecture/2.0 Laboratory  
This is a course directed toward the study of plastic materials used in processing areas. Proper selection and applications of various thermosetting and thermoplastics are studied. Testing of these materials is covered as specified in the ASTM Standards, including physical properties and chemical properties. Plastic material processing that is covered includes injection molding, compression molding and extrusion.

**PMT 70 COMPOSITES TECHNOLOGY** 2.5 UNITS  
Class hours: 2.0 Lecture/2.0 Laboratory  
Recommendation: PMT 67 or equivalent with a grade of Pass or "C" or higher.  
This course is designed for students in the field of fiberglass/composites. Emphasis is on the lay-up, vacuum bagging, and cure processing of wet laminating techniques and preimpregnated materials. Also included are processes of resin transfer molding (RTM), filament winding, pultrusion, bonding, and fabrication of composite structures with honeycomb core materials. Laboratory experience will cover safety of handling resins, reinforcements, and related materials.

**PMT 71 PLASTICS MANUFACTURING** 2.5 UNITS  
Class hours: 2.0 Lecture/2.0 Laboratory  
This is a specialty course for the advanced plastics student or one employed in the plastics industry. Emphasis will be placed on development of independent problem solving in the student's major area of specialization.

**PMT 72 TOOLING FOR PLASTICS** 2.5 UNITS  
Class hours: 2.0 Lecture/2.0 Laboratory  
Recommendation: PMT 61 or PMT 67 or PMT 70 or equivalent with a grade of Pass or "C" or higher.  
This course covers basic tooling concepts and materials for making various plastic composite molds. These include laminated, cast and high temperature plastic tools as well as plaster tooling. Design recommendations, physical properties data, repair procedures and techniques will be discussed.

**PMT 75 RESIN TRANSFER MOLDING** 1.0 UNIT  
Class hours: 1.0 Lecture/1.0 Laboratory  
This course is designed for individuals in the field of fiberglass/composites, tooling and production. This class includes lecture/demonstration with "hands-on" Resin Transfer Molding (RTM) molding and production techniques. Emphasis is on converting parts currently being made by the hand lay-up method to the closed mold RTM process is covered. 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 76 VACUUM INFUSION PROCESS (VIP)/RESIN TRANSFER MOLDING (RTM)** 3.0 UNITS  
Class hours: 3.0 Lecture/1.0 Laboratory  
This course is designed for individuals in the field of fiberglass/composites, tooling, and production. It includes lecture/demonstration with Resin Transfer Molding (RTM) and Vacuum Infusion Process (VIP) moldmaking and production techniques. Emphasis on converting parts currently being made by the hand lay-up method to the closed mold RTM and VIP process are covered. Topics include safe RTM and VIP 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 77 PLASTICS TECHNOLOGY** 2.5 UNITS  
Class hours: 2.0 Lecture/2.0 Laboratory  
This is an overview of plastic manufacturing today. An overview of plastic molding and extrusion, includes injection molding, compression molding, testing equipment set-up and maintenance, and tooling.

**PMT 78 DIRECTED STUDIES** 1.0 UNIT  
Class hours: 3.0 Independent Study  
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.

**PMT 79 DIRECTED STUDIES** 2.0 UNITS  
Class hours: 6.0 Independent Study  
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.

**PMT 80 PLASTICS TECHNOLOGY** 2.5 UNITS  
Class hours: 2.0 Lecture/2.0 Laboratory  
This course provides knowledge of materials and processes used in the field of plastic manufacturing today. An overview of plastic
POLITICAL SCIENCE

(Humanities, Social Science Division)

POL 90
INTERNET STRATEGIES FOR CIVIC COMMUNICATION 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Pass 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.

POL 110
CALIFORNIA STATE AND LOCAL GOVERNMENT 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 20 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Pass or "C" or higher.
This course stresses the study of California state and local government (counties, cities, and special districts) and California party politics, including the study of the California constitution, intergovernmental relations, regional governments, and urban politics and problems. This course is designed to make available to students concepts, information, and skills which will enable them to better understand the political and governmental systems in which citizens function.

POL 201
INTRODUCTION TO POLITICAL SCIENCE AND AMERICAN GOVERNMENT 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Pass or "C" or higher.
This course is an introductory survey of the concepts, theories, institutions, processes and systems in which citizens function. 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 220
COMPARATIVE GOVERNMENT 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory score on the English Placement Process or ENGL 52 with a grade of Pass or "C" or higher and satisfactory completion of the Reading Placement Process or READ 54 with a grade of Pass or "C" or higher.
This course introduces students to the concept of how public policy is formed, how law reflects and affects societal norms, how legal mores change over time, and how law relates to its execution. Students study civil liberties, Supreme Court cases, and the tension between rights guaranteed by the Bill of Rights. Students learn how gender, race and sexuality have been reflected in law and policy.
Transfer Credit: CSU; UC

POL 230
CONTEMPORARY POLITICAL ISSUES: MIDDLE EAST 3.0 UNITS
Class hours: 3.0 Lecture
A one-semester course emphasizing the basic issues in conflict between nations of the Middle East, this class will investigate, in addition to the political and economic conditions, the social and cultural contributions of the Middle Eastern nations.
Transfer Credit: CSU; UC

POL 260
PUBLIC POLICY AND THE SUPREME COURT 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: ENGL 52 or equivalent with a grade of Pass or "C" or higher, and READ 54 or equivalent with a grade of Pass or "C" or higher.
This course introduces students to the concept of how public policy is formed, how law reflects and affects societal norms, how legal mores change over time, and how law relates to its execution. Students study civil liberties, Supreme Court cases, and the tension between rights guaranteed by the Bill of Rights. Students learn how gender, race and sexuality have been defined over time by policymakers.
Transfer Credit: CSU
### Announcements of Courses

**POL 298**  
**Directed Studies**  
1.0 UNIT  
Class hours: 3.0 Independent Study  
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*

**POL 299**  
**Directed Studies**  
2.0 UNITS  
Class hours: 6.0 Independent Study  
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*

**PSYCHOLOGY**  
*(Humanities, Social Science Division)*

**PSYC 101**  
**General Introductory Psychology**  
3.0 UNITS  
Class hours: 3.0 Lecture  
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 presents a general survey of psychology including development of the individual, learning, thinking, motivation, emotion, and perception. Some study is also given to the understanding and measurement of individual differences, group processes, and the biology of behavior.  
*Transfer Credit: CSU; UC*

**PSYC 103**  
**Critical Thinking in Psychology**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher.  
This course covers the nature of critical thinking from a psychological perspective. Focusing on the nature of thinking, the course emphasizes the development of critical thinking applied to scientific inquiry. Through an interactive classroom environment that includes lecture/discussion, debates, and writing exercises, critical thinking skills such as problem solving, determining cause and effect relationships, analyzing arguments, fallacies in thinking, comparing facts with opinion, an understanding probabilities are developed. There will be an emphasis on the application of critical thinking skills to everyday issues.  
*Transfer Credit: CSU; UC*

**PSYC 139**  
**Issues in Psychology**  
2.0 UNITS  
Class hours: 2.0 Lecture  
Prerequisite: PSYC 101 or equivalent with a grade of Pass or "C" or higher.  
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*

**PSYC 150**  
**Personal and Social Adjustment**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: PSYC 101 and ENGL 52 or equivalent with grades of Pass or "C" or higher.  
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*

**PSYC 210**  
**Elementary Statistics**  
(CAN PSY 6)  
4.0 UNITS  
Class hours: 3.0 Lecture/3.0 Laboratory  
Prerequisite: MATH 80 or MATH 80B or equivalent with a grade of Pass 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, especially in psychology and sociology. 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**  
(CAN PSY 8)  
4.0 UNITS  
Class hours: 3.0 Lecture/3.0 Laboratory  
Prerequisite: PSYC 101 or equivalent with a grade of Pass or "C" or higher.  
Recommendation: Satisfactory score on English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 241**  
**Introduction to Psychobiology**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Recommendation: PSYC 101 or equivalent with a grade of Pass or "C" or higher.  
This course is a study of the biology of behavior, covering cells and what they do; and the structure, function, and development of the nervous and hormone systems. It also covers sensory processes, the neurological basis of motivated and emotional behavior, along with a series of specific behavioral categories, such as pain, aggression, sleep, dreaming, sexual behavior and mental illness. In addition, it explores the biological basis of the higher
cerebral functions crucial to human beings as Homo sapiens, learning, memory, intelligence, thought and language.

Transfer Credit: CSU; UC

PSYC 245
DRUGS AND BEHAVIOR  3.0 UNITS
Class hours: 3.0 Lecture
This course entails a detailed survey of the various types of psycho-active drugs that are used and misused in our culture, including legal drugs, such as those used to treat psychiatric disorders, and illegal drugs, including some stimulants, psychedelic, and opiates. The psycho-active properties and the behavioral consequences of drug use and misuse will be the focus. The societal and cultural influences on drug use/misuse, treatment, prevention, history, laws, and ethics will be covered in this course.

Transfer Credit: CSU

PSYC 251
DEVELOPMENTAL PSYCHOLOGY  3.0 UNITS
Class hours: 3.0 Lecture
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; UC

PSYC 261
SOCIAL PSYCHOLOGY  3.0 UNITS
Class hours: 3.0 Lecture
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 265
PSYCHOLOGY OF GENDER  3.0 UNITS
Class hours: 3.0 Lecture
This course will examine the psychological issues that are a part of each gender’s experiences. An exploration of gender and sex differences and issues specific to women will also be undertaken. Topics include the psychology of reproduction, ability, achievement, work, social interactions, sexuality, growing older, violence against women, and mental illness. An emphasis will be placed on differences that exist between women as they relate to race, ethnicity, culture, religion, and class. The evaluation of these topics is relevant for all genders.

Transfer Credit: CSU; UC

PSYC 271
ABNORMAL PSYCHOLOGY  3.0 UNITS
Class hours: 3.0 Lecture
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 273
MENTAL HEALTH WORKER FIELD EXPERIENCE  3.0 UNITS
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.
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

PSYC 299
DIRECTED STUDIES  2.0 UNITS
Class hours: 6.0 Independent Study
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

RADIO - TELEVISION
(Fine Arts, Communication Division)

RTV 151
MOTION PICTURES, RADIO, AND TELEVISION  3.0 UNITS
Class hours: 3.0 Lecture
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

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### Announcement of Courses

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</table>
| RTV 152     | INTRODUCTION TO BROADCASTING | 3.0 | 3.0 Lecture | 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 | 3.0 | 2.0 Lecture/3.0 Laboratory | This course is a study and practice of digital audio production in radio broadcasting centered around the computer. This focus is on digital manipulation of sounds using current professional grade software. Students will make actual broadcasts, podcasts, and.wav files on a digital medium that will result in an audio portfolio. This course may be taken a maximum of 4 times. (Formerly TH 155)  
Transfer Credit: CSU |
| RTV 170     | BROADCAST NEWS/WEBCASTING | 1.0 | 0.5 Lecture/1.0 Laboratory | This course focuses on broadcast newswriting and production techniques using the college radio station, WPMD, as a practical laboratory. Students will develop and research story ideas for regular news broadcasts on WPMD.  
Newscasting and reporting for broadcast will be emphasized, along with ethics and legal aspects of communication. This course is not open to students currently enrolled in or who have completed JOUR 170. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU |
| RTV 255     | EDITING AUDIO | 3.0 | 2.0 Lecture/3.0 Laboratory | Prerequisite: RTV 155 or equivalent with a grade of Pass or “C” or higher.  
This course is a study and practice of digital audio production in radio broadcasting centered around the computer. This focus is on digital manipulation of sounds using current professional grade software. Students will make actual broadcasts, podcasts, and.wav files on a digital medium that will result in an audio portfolio. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU |
| RTV 298     | DIRECTED STUDIES | 1.0 | 3.0 Independent Study | 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 |
| RTV 299     | DIRECTED STUDIES | 2.0 | 6.0 Independent Study | 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 |
| READ 6      | TUTOR TRAINING | 0.5 | 3.0 Lecture | Prerequisite: Satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Pass 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 repeated for a maximum of one unit. This course is offered on a credit/no credit basis only. |
| READ 41     | INDIVIDUALIZED READING | 0.5 | 2.0 Laboratory | 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 may be assigned: phonics, vocabulary study, vocabulary in context, literal comprehension, inferential comprehension, critical reading or study-related reading. This course may be taken a maximum of 4 times. (Formerly AED 90.41) |
| READ 42     | READ ACCESS | 3.0 | 3.0 Lecture/1.0 Laboratory | 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)**

**INTRODUCTION TO COLLEGE READING** 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 42 or equivalent with a grade of Pass or "C" or higher.

This course is designed for students who wish to improve basic reading skills for success in college-level courses. Coursework includes work on fundamental word analysis skills and fundamental comprehension skills. This course will be offered on a credit/no credit basis only. Since this course is approved for distance education, those students may complete their lab work online.

**READ 44 (Not Degree Applicable)**

**EFFECTIVE STUDY METHODS FOR COLLEGE** 3.0 UNITS
Class hours: 3.0 Lecture
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** 3.0 UNITS
Class hours: 3.0 Lecture
This course develops the ability to acquire and improve reading skills necessary for success in the students’ occupational lives. All of the instructional activities in this course will strengthen specific technology course curriculum: reading comprehension, vocabulary development, word attack, and study-reading strategies that will prepare students for reading in the workplace.

**READ 54**

**ADVANCED COLLEGE READING** 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 43 or equivalent with a grade of Pass or "C" or higher.

This course is designed to improve literal, interpretive, critical comprehension, and vocabulary skills. Emphasis will be on structured vocabulary development and college-level reading skills.

**READ 98**

**DIRECTED STUDIES** 1.0 UNIT
Class hours: 3.0 Independent Study
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.

**READ 100**

**SPEED READING METHODS AND APPLICATIONS** 3.0 UNITS
Class hours: 3.0 Lecture
This course is designed to increase reading speed and comprehension in college-level material. Emphasis is placed on 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: 1.5 Lecture
This course is identical to the first half of Reading 100. It 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 100B**

**SPEED READING/APPLICATIONS** 1.5 UNITS
Class hours: 1.5 Lecture
Prerequisite: READ 100A or equivalent with a grade of Pass 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** 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Pass or "C" or higher and ENGL 100 or equivalent with a grade of Pass or "C" or higher.

This course focuses on the development and application of reading skills in the interpretation, analysis, criticism, and advocacy of ideas encountered in academic readings across the curriculum and Internet media sources.

**Transfer Credit: CSU**

**REAL ESTATE**

**(Business Division)**

**RE 1T**

**REAL ESTATE COMPUTER TUTORIAL** 0.5 UNIT
Class hours: 1.0 Laboratory
This course develops proficiency in computer applications in Real Estate. Students must attend one hour minimum per week and are limited to a maximum of three hours per week. (Formerly BUSR 1T)

**RE 50**

**INTRODUCTION TO REAL ESTATE SOFTWARE** 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: RE 101 or equivalent with a grade of Pass or "C" or higher

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Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course covers hands-on training using WinForms, creating a market analysis for sellers, searching the Multiple Listing Service for properties, and then downloading or e-mailing these offerings for presentation to buyers, renting versus buying analysis presentation to buyers, renting versus buying analysis, and using realist.com to locate owner of properties. In addition, students will learn how to calculate a seller’s net sheet when selling a home, as well as a buyer’s net sheet when purchasing a home. (Formerly BUSR 50)

RE 51
REAL ESTATE PRE-LICENSE 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: RE 101 or equivalent with a grade of Pass 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. (Formerly BUSR 51)

RE 52
MORTGAGE LOAN BROKERING AND LENDING 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: RE 101 or equivalent with a grade of Pass 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. (Formerly BUSR 52)

RE 53
ADVANCED REAL ESTATE APPRAISAL 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: RE 131 or equivalent with a grade of Pass 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, 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, land and building residual techniques are covered. (Formerly BUSR 53)

RE 54
COMPUTERS IN REAL PROPERTY APPRAISAL PRACTICE 3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: RE 53 or RE 131 or equivalent with a grade of Pass or "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 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, 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. (Formerly BUSR 54)

RE 55
REAL ESTATE OFFICE ADMINISTRATION 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: RE 101 or equivalent with a grade of Pass 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; and product marketing and other skills related to financing, expansion, and growth. (This course may be taken as a broker’s license requirement.) (Formerly BUSR 55)

RE 98
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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.

RE 99
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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.

RE 101
REAL ESTATE PRINCIPLES 3.0 UNITS
Class hours: 3.0 Lecture
This is a beginning course in real estate, which introduces the student to real estate fundamentals and principles. Major topics covered are the following: 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. This course can be taken in either a traditional or an online learning environment. (Formerly BUSR 101)
Transfer Credit: CSU

RE 120
REAL ESTATE FINANCE 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: RE 101 or equivalent with a grade of Pass or "C" or higher
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. (Statutorily required by the Department of Real Estate for a Broker’s License.) (Formerly BUSR 120)
Transfer Credit: CSU

RE 125
LEGAL ASPECTS OF REAL ESTATE 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: RE 101 or LAW 111 or equivalent with a grade of Pass or "C" or higher
This course is designed to be of material assistance to real estate licensees, college students majoring in real estate, and others interested in real estate. This is a practical,
Announcement of Courses

Class hours: 3.0 Lecture
This course is designed to acquaint the students with everyday real estate practice and to familiarize them with forms used in the real estate industry, as well as keep them abreast of the changing conditions in the real estate market, notably in lending, land utilization, and zoning. This course will inform the students of current selling practices and techniques. (This course is statutorily required by the Department of Real Estate for a Salesperson’s license as well as required for a Broker’s License.) (Formerly BUSR 130)
Transfer Credit: CSU

RE 151
FUNDAMENTALS OF
ESCROW 3.0 UNITS

Class hours: 3.0 Lecture
Recommendation: RE 101 or equivalent with a grade of Pass or "C" or higher.
This is a basic course covering the principles and fundamentals of escrow procedure, with emphasis on the duties and responsibilities of escrow personnel. Students will understand why escrow is 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. This course may be taken as one of the three choices of college-level classes required for a Broker’s License. (Formerly BUSR 151)
Transfer Credit: CSU

RE 160
REAL ESTATE ECONOMICS 3.0 UNITS

Class hours: 3.0 Lecture
Recommendation: RE 101 or equivalent with a grade of Pass or "C" or higher.
This course covers principles and problems in urban development such as 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, land resources, public housing, urban renewal and rehabilitation, and impact of environmental controls. (This course is required for California Real Estate Broker’s License.) (Formerly BUSR 160)
Transfer Credit: CSU

RE 172
REAL ESTATE OCCUPATIONAL
WORK EXPERIENCE/CAREER
INTERNSHIP 2.0 UNITS

Class hours: 1 hr. /wk coordination class
Prerequisite: RE 101 or equivalent with a grade of Pass or "C" or higher.
Corequisite: Enrollment in 7 or more units, including Real Estate Occupational Work Experience/Career Internship, in a declared real estate 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.
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. (Formerly BUSR 172)
Transfer Credit: CSU
### RE 174
**REAL ESTATE OCCUPATIONAL WORK EXPERIENCE/CAREER INTERNSHIP**  
4.0 UNITS  
Class hours: 1 lecture  
Prerequisite: RE 101 or equivalent with a grade of Credit or "C" or higher.  
Corequisite: Enrollment in 7 or more units, including Real Estate Occupational Work Experience, in a declared real estate major.  
Three units of Real Estate Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester. Four units of 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. (Formerly BUSR 174A)  
Transfer Credit: CSU

### RE 174A
**REAL ESTATE OCCUPATIONAL WORK EXPERIENCE/CAREER INTERNSHIP**  
4.0 UNITS  
Class hours: 1 hour/week coordination class  
Prerequisite: Completion of 12 units in Business Administration, Business Real Estate or Paralegal or equivalent.  
The Business Real Estate 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

### RE 195
**COMMON INTEREST DEVELOPMENTS**  
3.0 UNITS  
Class hours: 3.0 Lecture  
This course covers the basics of managing, purchasing, and selling of common interest developments (CID’s) that are governed by homeowner associations (HOA), including condominiums. All applicable laws will be included in the course. (Formerly BUS 195)  
Transfer Credit: CSU

### SIGN LANGUAGE
(Federal Arts Division)

#### SL 101
**BEGINNING AMERICAN SIGN LANGUAGE**  
3.0 UNITS  
Class hours: 3.0 Lecture  
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**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Prerequisite: SL 101 or equivalent with a grade of Pass or "C" or higher.

### ANNOUNCEMENT OF COURSES

- 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

- **SL 201**  
  **ADVANCED AMERICAN SIGN LANGUAGE**  
  3.0 UNITS  
  Class hours: 3.0 Lecture/1.0 Laboratory  
  Prerequisite: SL 102 or equivalent with grade of Pass 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

### SOCIOLOGY
(Federal Arts Division)

#### SOC 101  
**INTRODUCTORY SOCIOLOGY PRINCIPLES**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Sociology 1 represents an introductory survey of the fundamental theories, philosophies and problems associated with the study of sociology in a pluralistic society. A multicultural approach is used throughout in the analysis of human relationships through a study of major concepts. Institutions and their functions, personality development, social interaction, social change, collective behavior, the environment, war and peace are major themes for this course.  
Transfer Credit: CSU; UC

#### SOC 110  
**MARRIAGE AND THE FAMILY**  
3.0 UNITS  
Class hours: 3.0 Lecture  
Sociology 110 represents an introductory survey of the sociological, psychological and biological factors involved in love, marital and family relationships. Using a multicultural approach, consideration is given to the complex issues of dating, courting, mate selection, alternatives to marriage, conflict, communication, sex roles, child-bearing and child-rearing.  
Transfer Credit: CSU; UC

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### SOC 120
**INTRODUCTION TO HUMAN SEXUALITY** 3.0 UNITS
Class hours: 3.0 Lecture
Sociology 120 represents an introductory survey of the behavioral, biological, historical, religious, and socio-cultural aspects of human sexuality in a pluralistic society. A multicultural approach is used throughout in the study of the anatomy and physiology of sexual function, treatment of dysfunction, psychosexual development and the relationship between sexuality, changing social/cultural standards and contemporary values. Sex across the life span, pregnancy, birth control, sexually transmitted diseases, the AIDS crisis, homosexuality, sexual assault, incest, and child molestation are among the topics covered.

*UC credit limits may apply. PSYC 265 and SOC 202 combined: maximum credit, one course.

### SOC 201
**SOCIAL ISSUES** 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: SOC 101 or equivalent with a grade of Pass or "C" or higher.
Sociology 201 represents a study of undesirable socially constructed social problems. Special emphasis is on the range of phenomena considered social problems which may include: war, overpopulation, poverty, street crime, white-collar crime, racial/ethnic conflict, mental illness, the environment, health care, international terrorism, government regulation, drug abuse, ageism, unemployment, hopelessness, the decline of the family, child abuse, urban decay, pornography, overcrowded prisons, campus unrest, sex discrimination, abortion, alienated youth, and AIDS.

*UC credit limits may apply. See a counselor for an explanation.

### SOC 210
**AMERICAN MINORITY RELATIONS** 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: SOC 101 or equivalent with a grade of Pass 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** 3.0 UNITS
Class hours: 3.0 Lecture
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** 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: SOC 101 or PSYC 101 or equivalent with a grade of Pass or "C" or higher is strongly recommended.
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, UC

### SOC 225
**CONTEMPORARY SOCIAL ISSUES** 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: SOC 101 or equivalent with a grade of Pass or "C" or higher is strongly recommended.
This is a specialized course designed to acquaint the student with major social issues facing the United States and to a limited extent, the world.
This course focuses on origins, sustaining causes and possible solution to societal issues. The specific issue will be decided by the course instructor and announced in the Schedule of Classes. This course may be taken for a maximum of 4 times.

*Transfer Credit: CSU, UC credit determined after admission

### SOC 230
**JUVENILE DELINQUENCY** 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: SOC 101 or equivalent with a grade of Pass or "C" or higher is strongly recommended.
This course is a study of adolescents and their lives within contemporary society with emphasis on what is defined and accepted as justice for adolescents in general and delinquents in particular.

*Transfer Credit: CSU

### SOC 250
**SOCIOLOGY OF AGING** 3.0 UNITS
Class hours: 3.0 Lecture
This course represents an introductory survey of the fundamental theories and problems of aging. Using a multicultural approach, the course investigates the sociological, psychological, and physical aspects of the human aging process from middle age to old age. Students are required to investigate why we study aging, to understand the demography of aging as well as the historical and cross-cultural aspects of the aging process in a society. A knowledge of current policies and their effects on the aged population is also desirable. Using and understanding various methodologies is also part of the course.

*Transfer Credit: CSU, UC

### SOC 298
**DIRECTED STUDIES** 1.0 UNIT
Class hours: 3.0 Independent Study
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

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All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
SPANISH
(Liberal Arts Division)

SPAN 101  (CAN SPAN 2) (CAN SPAN SEQ A)
ELEMENTARY SPANISH  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
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  (CAN SPAN 4) (CAN SPAN SEQ A)
ELEMENTARY SPANISH  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
Prerequisite: SPAN 101 or SPAN 103B or equivalent with a grade of Pass or "C" or higher.
This course is a continuation of the study of the 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  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: SPAN 103A or equivalent with a grade of Pass or "C" or higher.
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  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
This beginning course corresponding to SPAN 101 is designed for students already able to understand and speak the language as used in everyday situations. Emphasis is on listening, speaking, reading, writing and special problems with structures and vocabulary. 
Transfer Credit: CSU; UC*
*UC credit limits may apply. SPAN 101 and SPAN 111 combined: maximum credit, one course.

SPAN 112
ELEMENTARY SPANISH FOR SPANISH SPEAKERS  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
Prerequisite: SPAN 101 or SPAN 111 or SPAN 103B or equivalent with a grade of Pass 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

SPAN 201  (CAN SPAN 8) (CAN SPAN SEQ B)
INTERMEDIATE SPANISH  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Pass 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 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 10) (CAN SPAN SEQ B)
INTERMEDIATE SPANISH  4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: SPAN 201 or equivalent with a grade of Pass 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
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.

SPAN 210
HIGHLIGHTS OF HISPANIC CULTURE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Pass 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 peoples, 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 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Pass or "C" or higher.
Study of fundamental grammatical principles and sentence structures with drills and translations. (Special emphasis on uses of the Imperfect and the Preterite 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 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: SPAN 102 or equivalent with a grade of Pass or "C" or higher.
This course gives 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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: SPAN 281 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: SPAN 282 or equivalent with a grade of Pass 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

SPAN 298
DIRECTED STUDIES 1.0 UNIT
Class hours: 3.0 Independent Study
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

SPAN 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 6.0 Independent Study
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

SPEECH

(Liberal Arts Division)

SPCH 30 (Not Degree Applicable)
COMMUNICATION DISORDERS 1.0 UNIT
Class hours: 3.0 Laboratory
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 for a maximum of 4 times. The course is to be offered on a credit/no credit basis.

SPCH 31 (Not Degree Applicable)
COMMUNICATION DISORDERS 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: 4 units of SPCH 30 or equivalent with a grade of Pass 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 for a maximum of 4 times. This course is offered on a Credit/No Credit basis.

SPCH 45 (Not Degree Applicable)
SPEECH-COMMUNICATION FOR CAREERS 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
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 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Pass 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 and participation in 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

SPCH 120
FUNDAMENTALS OF INTERPERSONAL COMMUNICATION 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher. 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 videotaping as instructional tools.
Transfer Credit: CSU; UC

SPCH 130
FUNDAMENTALS OF SPEAKING 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Pass 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; UC

SPCH 132
FUNDAMENTALS OF SMALL GROUP COMMUNICATION 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass 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

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
SPCH 140  
**ORAL INTERPRETATION OF LITERATURE**  
Class hours: 3.0 Lecture  
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent or SPCH 60 or equivalent with a grade of Pass 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

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SPCH 145  
**STORYTELLING**  
Class hours: 3.0 Lecture  
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

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SPCH 150  
**ORGANIZATIONAL COMMUNICATION**  
Class hours: 3.0 Lecture  
Recommendation: READ 54 or ENGL 52 or equivalent with a grade of Pass 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

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SPCH 160  
**PARLIAMENTARY PROCEDURE**  
Class hours: 1.0 Lecture  
This course entails an examination of principles, practices and procedures in formal deliberation. Emphasis is placed on parliamentary law.  
.Transfer Credit: CSU

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SPCH 165  
**GROUP PROCEDURE**  
Class hours: 1.0 Lecture  
Prerequisite: SPCH 160 or equivalent with a grade of Pass 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

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SPCH 200  
**CONTEMPORARY COMMUNICATION TOPICS**  
Class hours: 3.0 Lecture  
Recommendation: ENGL 52 or READ 54 with a grade of Pass 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 for a maximum of 4 times.  
.Transfer Credit: CSU, UC credit determined after admission.

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SPCH 229  
**SPEECH AND LANGUAGE DEVELOPMENT IN CHILDREN**  
Class hours: 3.0 Lecture  
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

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SPCH 235  
**FUNDAMENTALS OF ARGUMENTATION AND PERSUASION**  
Class hours: 3.0 Lecture  
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher.  
This course focuses on argument 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

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SPCH 236  
**FORENSICS FOR ONE TOURNAMENT**  
Class hours: 1.0 Lecture/2.0 Laboratory  
Corequisite: SPCH 236 or SPCH 237.  
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 repeated for a maximum of 4 times.  
.Transfer Credit: CSU

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SPCH 237  
**FORENSICS FOR TWO TOURNAMENTS**  
Class hours: 1.0 Lecture/2.0 Laboratory  
Corequisite: SPCH 236.  
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 repeated for a maximum of 4 times.  
.Transfer Credit: CSU

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SPCH 238  
**FORENSICS FOR THREE TOURNAMENTS**  
Class hours: 1.0 Lecture/2.0 Laboratory  
Corequisite: SPCH 236 and SPCH 237.  
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 repeated for a maximum of 4 times.

**Transfer Credit:** CSU

**SPCH 239**

**FORENSIC WORKSHOP** 2.0 UNITS

Class hours: 1.0 Lecture/3.0 Laboratory

Any person anxious to develop verbal confidence is encouraged to enroll in the Forensic Workshop. Workshop includes opportunities in speaking at Intercollegiate speech tournaments and community organizations such as Kiwanis, Lions, Rotary, etc. This course may be taken for a maximum of 4 times.

**Transfer Credit:** CSU

**SPCH 240**

**ORAL INTERPRETATION:**

**READERS’ THEATRE** 3.0 UNITS

Class hours: 3.0 Lecture

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 271**

**VOICE AND ARTICULATION** 3.0 UNITS

Class hours: 3.0 Lecture

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

**SPCH 298**

**DIRECTED STUDIES** 1.0 UNIT

Class hours: 3.0 Independent Study

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

**SPCH 299**

**DIRECTED STUDIES** 2.0 UNITS

Class hours: 6.0 Independent Study

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

**SPCH 331**

**ADAPTIVE COMMUNICATION TECHNOLOGY** 1.5 UNITS

Class hours: 1.5 Lecture/0.5 Laboratory

This course focuses on normal verbal and non-verbal communication across the life span, 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 110**

**NORMAL COMMUNICATION, DISORDERS, AND DIFFERENCES** 4.0 UNITS

Class hours: 4.0 Lecture/1.0 Laboratory

Recommendation: A&P 120 or equivalent with a grade of Pass or "C" or higher.

This course focuses on normal verbal and non-verbal communication across the life span, 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** 1.0 UNIT

Class hours: 3.0 Laboratory

Prerequisite: SLP 100 or equivalent with a grade of Pass or "C" or higher.

Corequisite: SPCH 271.

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 for a maximum of 3 times.

**Transfer Credit:** CSU

**SLP 125**

**CHILDHOOD DISORDERS AND TREATMENT** 5.0 UNITS

Class hours: 4.0 Lecture/3.0 Laboratory

Prerequisite: SLP 100 and SLP 110 or equivalent with grades of Pass or "C" or higher.

Recommendation: A & P 120 or equivalent with a grade of Pass 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 Laboratory

Prerequisite: Completion of SLP 100 or equivalent with a grade of Pass or "C" or higher.

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 235
ADULT DISORDERS AND TREATMENT  5.0 UNITS
Class hours: 4.0 Lecture/3.0 Laboratory
Prerequisite: SLP 100 or equivalent with a grade of Pass or "C" or higher.
This course is an introduction to the different clinical settings in which the speech-language pathology assistant may work. The course focuses on screening procedures and treatment interventions used for speech, language, and hearing disorders in adults.

Transfer Credit: CSU

SLP 240
CHILDHOOD FIELD EXPERIENCE  2.5 UNITS
Class hours: 0.5 Lecture/6.0 Laboratory
Prerequisite: SLP 120L, SLP 125, and SPCH 229 or equivalent with grades of Pass or "C" or higher.
The field experience will provide the student with the opportunity to perform speech-language pathology assistant responsibilities with children under appropriate supervision.

Transfer Credit: CSU

SLP 245
ADULT FIELD EXPERIENCE  2.5 UNITS
Class hours: 0.5 Lecture/6.0 Laboratory
Prerequisite: SLP 235 or equivalent with grade of Pass or "C" or higher.
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
(Technology Division)

TM 50
TECHNICAL MATHEMATICS  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: MATH 40 or equivalent with a grade of Pass or "C" or higher or satisfactory completion of the Math Placement Process.
This course is an introduction to the principles of algebra, geometry, and basic trigonometry as needed by students planning to work in any area of technology. Topics are covered which have particular emphasis on equations and formulas found in the shop area and drafting labs. Calculations of area, volume and layout are stressed. Conversions between English and metric measurements are introduced. The students will learn to solve right angle trigonometry problems and will learn how to find solutions to oblique triangles using the law of sines and the law of cosines.

Transfer Credit: CSU

TM 98
DIRECTED STUDIES  1.0 UNIT
Class hours: 3.0 Independent Study
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.

Transfer Credit: CSU

THEATRE ARTS
(Fine Arts, Communication Division)

TH 101
INTRODUCTION TO THE THEATRE  3.0 UNITS
(CAN DRAM 18)
Class hours: 3.0 Lecture
This broad survey of the entire theatre field focuses on modern theatre practice and theory. Some historical background is provided. Topics include stage lighting and design, acting and directing, properties and costume, theatre architecture, make-up, career opportunities, and playwriting.

Transfer Credit: CSU; UC

TH 102
HISTORY OF THE CLASSICAL THEATRE  3.0 UNITS
Class hours: 3.0 Lecture
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

TH 103
HISTORY OF THE MODERN THEATRE  3.0 UNITS
Class hours: 3.0 Lecture
This course is designed to introduce the student to the history and literature of the theatre from French Classicism to the 20th Century. 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

TH 104
HISTORY AND APPRECIATION OF MUSICAL THEATRE  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
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 for a maximum of 4 times.

Transfer Credit: CSU; UC

TH 108
IMPROVISATION FOR THE THEATRE  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
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 for a maximum of 2 times.

Transfer Credit: CSU; UC

TH 109
REMOUNTING A PRODUCTION 2.0 UNITS
Class hours: 1.0 Lecture/4.0 Laboratory
Prerequisite: TH 130 or TH 131 or TH 132 or audition or equivalent with a grade of Pass or “C” or higher.

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 for a maximum of 4 times.

Transfer Credit: CSU

TH 110 (CAN DRAM 8)
FUNDAMENTALS OF ACTING 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
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 for a maximum of 2 times.

Transfer Credit: CSU; UC

TH 111 (CAN DRAM 22)
INTERMEDIATE ACTING TO CHARACTERIZATION 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: TH 110 or equivalent with a grade of Pass 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 114
VOICE FOR ACTING 2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
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 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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 for a maximum of 2 times.

Transfer Credit: CSU; UC

TH 117
STAND-UP COMEDY 3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
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 performs these routines at venues both on-and off-campus. Field trips to local comedy clubs will be arranged. This course may be taken for a maximum of 2 times.

TH 120 (CAN DRAM 12)
THEATRE STAGECRAFT 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
This course introduces the student to the principles and basic techniques of theatrical scenery construction. The class will be involved in scene shop procedures and practices, safe tool usage, materials selection, and fabrication methods.

Transfer Credit: CSU; UC

TH 123 (CAN DRAM 14)
STAGE MAKE-UP 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
This course provides instruction in techniques of theatrical makeup. Crew assignments in college productions are required. This course may be taken for a maximum of 2 times.

Transfer Credit: CSU; UC

TH 123A
ADVANCED STAGE MAKEUP 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: TH 123 or equivalent with a grade of Pass or “C” or higher.

Recommendation: ART 110 and ART 112 or equivalent with grades of Pass or “C” or higher

This course provides instruction in techniques of theatrical makeup with a emphasis on three-dimensional special effects makeup. A crew assignment on a college production is required.

Transfer Credit: CSU

TH 126
WIGS AND HAIR FOR THEATRE 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
This course provides instruction in basic hair and wig styling and basic wig-making techniques for the theater. Crew assignment in college production are required.

Transfer Credit: CSU

TH 130
REHEARSAL AND PERFORMANCE FOR THE MINOR ROLE 1.0 UNIT
Class hours: 0.5 Lecture/2.5 Laboratory
Prerequisite: By audition
Students in this course will rehearse and perform in 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 for a maximum of 4 times.

Transfer Credit: CSU; UC

TH 131
REHEARSAL AND PERFORMANCE FOR THE SUPPORTING ROLE 2.0 UNITS
Class hours: 1.0 Lecture/4.0 Laboratory
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 “supporting” roles. The course may be taken for a maximum of 4 times.

Transfer Credit: CSU; UC

TH 132
REHEARSAL AND PERFORMANCE FOR THE LEADING ROLES 3.0 UNITS
Class hours: 1.0 Lecture/7.0 Laboratory
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 for a maximum of 4 times.

Transfer Credit: CSU; UC

TH 133
STAGE CREW ACTIVITY 1.0 UNIT
Class hours: 0.5 Lecture/2.5 Laboratory
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 for a maximum of 4 times.

Transfer Credit: CSU; UC

TH 134
TECHNICAL PRODUCTION 2.0 UNITS
Class hours: 1.0 Lecture/5.0 Laboratory
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 for a maximum of 4 times.

Transfer Credit: CSU; UC

TH 136
TOURING THEATRE PRODUCTION FOR SUPPORTING ROLES 2.0 UNITS
Class hours: 1.5 Lecture/1.5 Laboratory
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 for a maximum of 4 times.

Transfer Credit: CSU

TH 137
TOURING THEATRE PRODUCTION FOR LEADING ROLES 2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
Prerequisite: By audition
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 for a maximum of 4 times.

Transfer Credit: CSU

TH 140
BEGINNING JAZZ DANCE 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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
INTERMEDIATE JAZZ DANCE 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: TH 140 or equivalent with a grade of Pass or “C” or higher.
This course is a continuation of the development of jazz dance techniques and style begun in TH 140 or DANC 140. Emphasis is on mastering of more complicated jazz dance combination patterns and their performance. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

TH 142
BEGINNING TAP DANCE 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
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 2 times.

Transfer Credit: CSU; UC

TH 143
INTERMEDIATE TAP DANCE 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: TH 142 or equivalent with a grade of Pass or “C” or higher.
This course is a continuation of the development of tap dance techniques and style begun in TH 142 or DANC 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 2 times.

Transfer Credit: CSU; UC

TH 144
DANCE FOR MUSICAL THEATRE 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course is an introduction to musical theatre dance styles, techniques, and repertory. Emphasis is on mastering the fundamental skills and styles basic to musical theatre dance techniques and performance. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

TH 145
COSTUME PRODUCTION FOR DANCE 1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 for a maximum of 4 times.

Transfer Credit: CSU; UC

TH 146
MUSICAL THEATRE PRODUCTION FOR CHORUS 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: By audition
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 repeated for a maximum of 4 times.

Transfer Credit: CSU; UC

TH 147
MUSICAL THEATRE PRODUCTION FOR LEADING ROLES 3.0 UNITS
Class hours: 1.0 Lecture/7.0 Laboratory
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 of musical instrument. This course may be taken for a maximum of 4 times.

Transfer Credit: CSU; UC

TH 150
APPRECIATION AND HISTORY OF THE MOTION PICTURE 3.0 UNITS
Class hours: 3.0 Lecture
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

TH 151
MOTION PICTURES, RADIO AND TELEVISION 3.0 UNITS
Class hours: 3.0 Lecture
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 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This is a hands-on course where students use a DV camera and a film (Super 8 or 16mm) to make two short original projects: a non-fictional film and a fictional film. Writing,
TH 156
TELEVISION PRODUCTION 3.0 UNITS
Class hours: 1.0 Lecture/5.0 Laboratory
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 for a maximum of 4 times.
Transfer Credit: CSU

TH 157
TELEVISION COMMERCIAL AND PUBLIC SERVICE ANNOUNCEMENT PRODUCTION 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: TH 153 or TH 156 or equivalent with a grade of Pass or "C" or higher.
This course is an introductory course in the study of the aesthetics and the production of the television commercial, including political ads and public service announcements. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

TH 158
MOTION PICTURE AND DIGITAL CINEMATOGRAPHY 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: TH 153 or equivalent with a grade of Pass or "C" or higher.
This is an introductory course in the craft of both digital and film cinematography. Students shoot scenes using Super8 and 16mm film, as well as digital video (DV). This course may be taken a maximum of 2 times.
Transfer Credit: CSU

TH 159
WORLD FILM 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: ENGL 52 or ENGL 155 or equivalent with a grade of Pass or "C" or higher or satisfactory completion of the English Placement Process.
This course examines the art of motion pictures and its international and global impact. It includes the critical analysis of feature films as a reflection of national, ethnic and cultural values.
Transfer Credit: CSU; UC

TH 160
GREAT FILM DIRECTORS 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
This is a survey course on the art and social impact of the film director. Through a series of collective film screenings, lectures, and discussions, students will analyze individual filmmakers. This course may be taken for a maximum of 2 times.
Transfer Credit: CSU; UC

TH 171
OCUPATIONAL WORK EXPERIENCE IN THEATRE 1.0 UNIT
Class hours: 1 lecture
Corequisite: Enrollment in 7 or more units, including Occupational Work Experience in Theatre, in a declared Theatre major. One unit of Occupational Work Experience in Theatre required 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 students/workers, the college, and the employers/trainers. First semester students will meet with the instructors 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.
Transfer Credit: CSU

TH 193
MOTION PICTURE EDITING 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This course will serve as an introduction to motion picture editing by taking students through the history of editing and analysis 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: 3.0 Lecture/2.0 Laboratory
Prerequisite: TH 110 or equivalent with a grade of Pass or "C" or higher.
This is an intensive acting course focusing on the study and performance of challenging scenes from Chekhov, Ibsen, Strindberg, Shaw, and Feydeau, as well as from Beckett, Pinter, Ionesco, Albee, and Mamet. Students will explore multiple objectives, acting between the lines, and techniques for absurdist plays and farce.
Transfer Credit: CSU; UC

TH 213
HISTORICAL STYLES OF ACTING 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: TH 110 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: TH 110 or equivalent with a grade of Pass or "C" or higher.
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 repeated for a maximum of 2 times.
Transfer Credit: CSU

TH 221
COSTUMING FOR THE STAGE 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: TH 110 or equivalent with a grade of Pass or "C" or higher.
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 for a maximum of 2 times.
Transfer Credit: CSU

TH 221A
ADVANCED COSTUMING FOR THE STAGE 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: TH 221 or equivalent with a grade of Pass or "C" or higher.
This course provides instruction to the student who has become proficient with basic costume construction practices and techniques. In
this course, the focus is on pattern drafting, cutting, fitting, construction, and decoration of costumes. The design and construction of costumes is underscored by a historical perspective. Wardrobe crew chief or a design assignment on a college production is required. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

TH 222  
(CAN DRAM 10)  
STAGE LIGHTING  
3.0 UNITS  

Class hours: 2.0 Lecture/3.0 Laboratory  
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  
2.0 UNITS  

Class hours: 1.0 Lecture/3.0 Laboratory  
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  
3.0 UNITS  

Class hours: 3.0 Lecture  
Prerequisite: ENGL 52 or equivalent with a grade of Pass 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.

Transfer Credit: CSU; UC

TH 254  
ADVANCED MOTION PICTURE PRODUCTION  
3.0 UNITS  

Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: TH 153 or equivalent with a grade of Pass or "C" or higher.  
This is an advanced course in the elements and practice of motion picture production. Students create and direct advanced motion picture projects using either 16mm film or digital video.

Transfer Credit: CSU

TH 293  
ADVANCED MOTION PICTURE EDITING  
3.0 UNITS  

Class hours: 2.0 Lecture/3.0 Laboratory  
Prerequisite: TH 193 or equivalent with a grade of Pass or "C" or higher.  
This course takes students through the more advanced features of current editing software such as Final Cut Pro 5, Live Type, Photoshop Elements, and Motion 2 to develop advanced skills in editing, compositing, and motion graphics to create better-edited projects. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

TH 298  
DIRECTED STUDIES  
1.0 UNIT  

Class hours: 3.0 Independent Study  
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

TH 299  
DIRECTED STUDIES  
2.0 UNITS  

Class hours: 3.0 Independent Study  
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

WELDING  
(Not Degree Applicable)  

WELD 39  
WELDING OCCUPATIONAL WORK EXPERIENCE  
3.0 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. Corequisite: (1) enrollment in the Welding vocational program with 7 or more units including occupational work experience.

Work experience/career internship provides the opportunity for welding 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.

WELD 43  
WELDING OCCUPATIONAL WORK EXPERIENCE  
4.0 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. Corequisite: (1) enrollment in the Welding vocational program with 7 or more units including occupational work experience.

Work experience/career internship provides the opportunity for welding 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.

WELD 44  
WELDING OCCUPATIONAL WORK EXPERIENCE  
4.0 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. Corequisite: (1) enrollment in the Welding vocational program with 7 or more units including occupational work experience.

Work experience/career internship provides the opportunity for welding 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.
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.

**WELD 50**
**BLUE PRINT READING FOR THE WELDING TRADES** 3.0 UNITS
Class hours: 3.0 Lecture
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** 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: WELD 120 or equivalent with a grade of Pass or "C" or higher, or concurrent enrollment.
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 2 times.

**WELD 52**
**PIPE WELDING FUNDAMENTALS** 4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: WELD 210L or equivalent with a grade of Pass 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** 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: WELD 120 or equivalent with a grade of Pass 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** 2.0 UNITS
Class hours: 6.0 Laboratory
Prerequisite: WELD 52 or equivalent with a grade of Pass 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 processes. This course may be taken a maximum of 2 times.

**WELD 55**
**MAINTENANCE WELDING** 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: WELD 100 and WELD 120 or equivalent with grades of Pass or "C" or higher, or appropriate work experience.
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 60**
**SAFETY AND THE WELDING ENVIRONMENT** 1.0 UNIT
Class hours: 1.0 Lecture
This course is designed to familiarize the welding student with recognized safety practices of the industry. Emphasis will be placed on compliance with government safety codes and regulations. Students will be introduced to preventive health and safety techniques and practices. Safety concerns relating to welding and cutting will be covered for both shop and field work environments.

**WELD 98**
**DIRECTED STUDIES** 1.0 UNIT
Class hours: 3.0 Independent Study
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.

**WELD 99**
**DIRECTED STUDIES** 2.0 UNITS
Class hours: 6.0 Independent Study
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.

**WELD 100**
**WELDING FUNDAMENTALS** 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
This introductory course is designed to familiarize the student with the history, principles, and practices of the welding industry and their relationship to our economy and society. Emphasis is placed on technical and practical applications of metal cutting, brazing and soldering, shielded metal arc, gas metal arc, gas tungsten arc welding processes, shop and field safety practices, welding metallurgy.
*Transfer Credit: CSU*

**WELD 120**
**BEGINNING ARC WELDING** 5.0 UNITS
Class hours: 4.0 Lecture/4.0 Laboratory
Recommendation: WELD 100 with a grade of Pass or "C" or higher, or concurrent enrollment, or appropriate work experience.
This course is designed for the beginning student welder covering the technical and practical aspects of the shielded metal arc welding (SMAW), gas metal arc welding (GMAW), and flux cored arc welding (FCAW) processes on ferrous and non-ferrous metals. Emphasis is placed on the safe operation of manual and semi-automatic welding and cutting tools and equipment.
*Transfer Credit: CSU*
### WELD 130
**GAS TUNGSTEN ARC WELDING FUNDAMENTALS** 5.0 UNITS
Class hours: 4.0 Lecture/4.0 Laboratory
Recommendation: WELD 100 or WELD 120 or equivalent with a grade of Pass or "C" or higher, or concurrent enrollment, or appropriate work experience.
This course is designed to provide the student with technical and practical welding skills on ferrous and non-ferrous metals using the gas tungsten arc welding process (GTAW), commonly known as TIG. Related classroom instruction covers technical data pertaining to this welding process with special emphasis on operational parameters of inverter type machines. Transfer Credit: CSU

### WELD 170
**STRUCTURAL FABRICATION** 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: WELD 100 or WELD 120 or WELD 130 or equivalent with a grade of Pass or "C" or higher.
Recommendation: WELD 50 or equivalent with a grade of Pass or "C" or higher.
This is a course designed to develop welding skills and structural fabrication techniques on real or simulated metal construction projects. Emphasis will be on the safe operation of fabricating equipment as applied to structural steel components. This course may be taken a maximum of 2 times. Transfer Credit: CSU

### WELD 200
**INTERMEDIATE ARC WELDING** 4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: WELD 120 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This is a course designed to refine 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 shielded metal arc (SMAW), gas metal arc (GMAW), and flux cored arc (FCAW) welding processes. Related classroom instruction is given in the technical data pertaining to these processes. Transfer Credit: CSU

### WELD 210L
**ARC WELDING APPLICATIONS** 2.0 UNITS
Class hours: 6.0 Laboratory
Prerequisite: WELD 200 or equivalent with a grade of Pass 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** 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: WELD 200 or equivalent with a grade of Pass 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 welding 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** 2.0 UNITS
Class hours: 6.0 Laboratory
Prerequisite: WELD 130 or equivalent with a grade of Pass 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** 2.0 UNITS
Class hours: 6.0 Laboratory
Prerequisite: WELD 240 or equivalent with a grade of Pass 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 LAYOUT** 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: WELD 53 or WELD 170 or equivalent with a grade of Pass of "C" or higher.
Recommendation: WELD 39 and WELD 50 or equivalent with a grade of Pass 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, Social Science Division)

### WS 101
**ISSUES FOR WOMEN IN AMERICAN SOCIETY** 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.
Issues for Women in American Society is a multidisciplinary course that provides a foundation for interpreting gender issues in America. It examines the essential components of women’s studies as an academic discipline; delineates theories of feminism and history of women’s movements; evaluates the social construction and politics of gender; analyzes the intersection of gender with race, ethnicity, class and gender; and identifies the issues of feminism in a global context. Transfer Credit: CSU; UC

### WS 102
**WOMEN AND RELIGION** 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Pass or "C" or higher and satisfactory completion of English Placement Process or ENGL 52 or equivalent with a grade of Pass 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 3.0 UNITS
Class hours: 3.0 Lecture
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: CSU

WS 104
COMMUNITY ORGANIZING AND ACTIVISM 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: WS 101 with a grade of Pass or "C" or higher. This course is designed to encourage the relationship between Cerritos College students who are interested in working with feminism-based organizations and the local organizations that need assistance. This class will expose students to potential volunteer, internship, and job opportunities while helping them build more impressive resumes and improve the lives of women.
Transfer Credit: CSU

WS 106
WOMEN IN SPORTS 3.0 UNITS
Class hours: 3.0 Lecture
This course provides students with a chronological history, analysis and interpretation of people, events, and issues that affect women in sports, in past and present society. Physiological, sociological, and psychological aspects of female athletes as related to sports, 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. This course is not open to students who are enrolled in or who have received credit for PE 106.
Transfer Credit: CSU; UC

WS 202
GENDER AND SOCIETY 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: SOC 101 or equivalent with a grade of Pass or "C" or higher or equivalent with a grade of Pass or "C" or higher. This course addresses the concept of gender as an organizing principle in men's and women's lives from a sociological perspective. The class will address the issue of the social construction of gender and how it relates to race, ethnicity, class, and sexuality, and how social institutions are gendered. Topics to be covered will include cultural ideas of gender, as well as gender and the economy, politics, the media, families, and education. It will also address how gender impacts interactions between individuals and groups. This course is not open to students who are enrolled in or who received credit in SOC 202.
Transfer Credit: CSU; UC

WS 204
WOMEN IN AMERICAN HISTORY 3.0 UNITS
Class hours: 3.0 Lecture
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 Pass or "C" or higher. This lecture/discussion course will survey women's history in the United States from colonial times to the 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 206
WOMEN IN THE GLOBAL ECONOMY 3.0 UNITS
Class hours: 3.0 Lecture
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 TECHNOLOGY
(Technology Division)

WMT 1 (Not Degree Applicable)
OPEN ENTRY/EXIT
WOODWORKING 0.5 UNIT
Class hours: 3.0 Laboratory
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.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
WMT 43 (Not Degree Applicable)
WOODWORKING MANUFACTURING
TECHNOLOGIES OCCUPATIONAL
WORK EXPERIENCE    3.0 UNITS
Office hours: 1 lecture
Corequisite: Enrollment in 2 or more units,
including Occupational Work Experience in
Theatre, in a declared Theatre major. One unit
of Occupational Work Experience in Theatre
required 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 for the business/organization.
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
will meet with the instructors 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.
Transfer Credit: CSU

WMT 44 (Not Degree Applicable)
WOODWORKING MANUFACTURING
TECHNOLOGIES OCCUPATIONAL
WORK EXPERIENCE    4.0 UNITS
Office hours: 1 lecture
Corequisite: Enrollment in 2 or more units,
including Occupational Work Experience in
Theatre, in a declared Theatre major. One unit
of Occupational Work Experience in Theatre
required 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 for the business/organization.
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
will meet with the instructors 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.
Transfer Credit: CSU

WMT 80
RUNNING A WOODWORKING
BUSINESS    3.0 UNITS
Office hours: 3.0 Lecture
This course provides an overview of business
management considerations and practices for
the establishment and operation of a successful
woodworking business.

WMT 98
DIRECTED STUDIES    1.0 UNIT
Office hours: 3.0 Independent Study
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 per 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.

WMT 99
DIRECTED STUDIES    2.0 UNITS
Office hours: 6.0 Independent Study
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 per 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.

WMT 101
INTRODUCTION TO
WOODWORKING    3.0 UNITS
Office hours: 2.5 Lecture/0.5 Laboratory
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. This
course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 102
INTRODUCTION TO SOLID
WOOD CASEGOODS    4.0 UNITS
Office hours: 2.5 Lecture/3.0 Laboratory
Prerequisite: WMT 101 or equivalent with a
grade of Pass or "C" or higher.
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 107
WOOD FINISHING    3.0 UNITS
Office hours: 2.0 Lecture/0.5 Laboratory
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
Office hours: 2.0 Lecture/0.5 Laboratory
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    1.0 UNIT
Office hours: 3.0 Laboratory
Prerequisite: WMT 101 or equivalent with a
grade of Pass or "C" or higher.
This course provides the student who has
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 2 times.
Transfer Credit: CSU
Announcement of Courses

WMT 115  
SCROLLSAW FRETWORK AND INTARSIA  2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
This course introduces students to the methods, tools, materials, and machinery used in scrollsawing. Students have the opportunity to create fretwork and intarsia projects using the scrollsaw. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

WMT 117  
WOODWORKING APPRECIATION  1.0 UNITS  
Class hours: 1.0 Lecture/1.3 Laboratory  
This course analyzes and explores the culture and history of woodworking in the Los Angeles region. Critical analysis of architectural woodworking and furnishings will be studied. The course focus is on wood and wood products design, markers, historically significant buildings, and collections, both public and private. This course may be taken a maximum of 3 times.

Transfer Credit: CSU

WMT 118  
INTRODUCTION TO WOODTURNING  2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
Recommendation: WMT 101 and WMT 102 or WMT 103 or equivalent with grades of Pass 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 woodworking lathe. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

WMT 119L  
INTRODUCTION TO WOODTURNING LAB  1.0 UNIT  
Class hours: 4.0 Laboratory  
Prerequisite: WMT 118 or equivalent with a grade of Pass or "C" or higher.  
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 a maximum of 4 times.

Transfer Credit: CSU

WMT 130  
FURNITURE DESIGN  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
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  4.0 UNITS  
Class hours: 2.0 Lecture/6.0 Laboratory  
Prerequisite: WMT 102 and WMT 103 or equivalent with grades of Pass or "C" or higher.  
This course for the advanced student covers the history, design, construction and production of seating pieces. The student will design and build a solid wood or exposed frame chair or bench. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

WMT 134  
FRAME MAKING  4.0 UNITS  
Class hours: 2.0 Lecture/6.0 Laboratory  
Prerequisite: WMT 103 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
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 for a maximum of 2 times.

Transfer Credit: CSU

WMT 137  
OUTDOOR FURNITURE  2.5 UNITS  
Class hours: 2.0 Lecture/2.0 Laboratory  
Prerequisite: WMT 102 or WMT 103 or equivalent with a grade of Pass or "C" or higher.  
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  2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
Prerequisite: WMT 102 or WMT 103 or WMT 155 or equivalent with a grade of Pass or "C" or higher.  
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  4.0 UNITS  
Class hours: 2.0 Lecture/6.0 Laboratory  
Prerequisite: WMT 103 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
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 248). This course may be taken a maximum of 2 times.

Transfer Credit: CSU

WMT 151  
INTRODUCTION TO FACEFRAME CABINETMAKING  4.0 UNITS  
Class hours: 2.5 Lecture/5.5 Laboratory  
Recommendation: WMT 181 or equivalent with grades of Pass or "C" or higher.  
In this course, students learn the foundational information and skills related to the 32mm system of cabinet manufacturing. It includes detailed coverage of the system, hands-on experience in product design, layout of boring patterns, and CNC machine operation. This class may be taken a maximum of 2 times.

Transfer Credit: CSU

WMT 153  
32MM SYSTEM OF CABINETMAKING  4.0 UNITS  
Class hours: 2.5 Lecture/5.5 Laboratory  
Prerequisite: WMT 151 or equivalent with a grade of Pass or "C" or higher.  
In this course, students learn the foundational information and skills related to the 32mm system of cabinet manufacturing. It includes detailed coverage of the system, hands-on experience in product design, layout of boring patterns, and CNC machine operation. This class may be taken a maximum of 2 times.

Transfer Credit: CSU

WMT 154  
INTRODUCTION TO CABINET INSTALLATION  3.0 UNITS  
Class hours: 2.0 Lecture/3.0 Laboratory  
Prerequisite: WMT 151 or WMT 153 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.  
This course introduces the student to the methods, materials, fasteners, hardware and tools used to install residential, commercial

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WMT 155
ARCHITECTURAL MILLWORK  4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 151 or equivalent with a grade of Pass or “C” or higher or appropriate work experience. 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 for a maximum of 2 times.
Transfer Credit: CSU

WMT 157
PASSAGE DOOR  4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 151 or WMT 102 or WMT 103 or equivalent with grades of Credit or “C” or higher, or appropriate work experience.
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, 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 159
SOLID SURFACE FABRICATION  4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Recommendation: WMT 101 or WMT 151.
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  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: WMT 101 or equivalent with a grade of Pass or “C” or higher.
Recommendation: WMT 103 or equivalent with a grade of Pass 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  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
This course introduces students to computer-aided cabinet design and manufacturing. Topics include utilization of software to design and manufacture cabinets, details of design standards, variables and parameters as well as industry drawings, contracts, proposals, materials, and cut lists. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 201
WOODWORKING WITH HAND TOOLS  4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
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 2 times.
Transfer Credit: CSU

WMT 202
ADVANCED FURNITURE CASEGOODS  4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 102 and WMT 103 or equivalent with a grade of Pass or “C” or higher.
Recommendation: WMT 201
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基本 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  4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 102 or WMT 103 or equivalent with a grade of Pass or “C” or higher.
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
ADVANCED TABLES  4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 102 and WMT 103 or equivalent with grades of Pass “C” or higher.
This advanced course expands the student’s knowledge of tables design and construction to include large tables such as dining and conference tables, expanding tables, and torsion box table top construction. Topics include table design, advanced table construction, bending laminations, curved part joinery and angled joinery. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 211
THE WORKBENCH CLASS  4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: WMT 102 and WMT 103 or equivalent with grades of Pass or “C” or higher.
Recommendation: WMT 201
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
ROUTER TABLES  4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: WMT 101 or WMT 151 or equivalent with grades of Pass or “C” or higher.
Recommendation: WMT 101 or WMT 102 or WMT 103 or equivalent with a grade of Pass 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 for a maximum of 2 times.

Transfer Credit: CSU

WMT 219L
WOODTURNING LAB 1.0 UNIT
Class hours: 4.0 Laboratory
Prerequisite: WMT 218 or equivalent with a grade of Pass or "C" or higher.
This course allows students to perfect and hone skills acquired during previous woodturning courses. In this lab, students design and construct woodturning projects of their choice that are relevant to the subject matter being taught. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

WMT 228L
PROJECT COMPLETION LAB 1.0 UNIT
Class hours: 4.0 Laboratory
Prerequisite: WMT 151 or WMT 153 or WMT 102 or WMT 103 or equivalent with a grade of Pass or "C" or higher.
This course provides students with the necessary time and facility to continue working a project to completion. Instruction is project specific with emphasis on problem solving and detail. This course may be taken for a total of 4 times.

Transfer Credit: CSU

WMT 229L
COMPREHENSIVE WOODWORKING MANUFACTURING SPECIALTY 2.5 UNITS
Class hours: 8.0 Laboratory
Prerequisite: WMT 102 or WMT 103 or WMT 151 or WMT 153 or equivalent with a grade of Pass or "C" or higher.
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 4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 102 and WMT 103 or equivalent with grades of Pass or "C" or higher.
This course in furniture making will challenge and improve the student's skills through the manufacture 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 jointery, complex laminations, subassembly and final assembly as well as finishing. This class focuses on the history and design of the Morris Chair, the first recliner. This course may be taken a maximum of 3 times.

Transfer Credit: CSU

WMT 235
WINDSOR CHAIR 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: WMT 118 with a grade of Pass or "C" or higher.
This course introduces the student to the methods, materials 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 239L
TRADITIONAL FURNITURE LAB 1.0 UNIT
Class hours: 3.5 Laboratory
Prerequisite: WMT 235 or equivalent with a grade of Pass or "C" or higher.
This course allows students to perfect and hone skills acquired during previous traditional furniture classes. In this class, students will design and construct traditional furniture pieces of their choice that are variations of pieces constructed in earlier classes. Emphasis is placed on safety, hand tool operations, and traditional construction and finishing techniques. This course may be taken a maximum of 2 times.

Transfer Credit: CSU

WMT 241
SPECIAL TOPICS IN HANDTOOLS 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: WMT 201 or equivalent with a grade of Pass or "C" or higher.
In this course, students will explore advanced topics in woodworking with handtools. Topics may include joinery, dovetails, jigs, saw sharpening, handplanes, or other advanced subjects. The specific topic of a particular offering will be announced in the Schedule of Classes. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

WMT 244
CHEST OF DRAWERS 4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 102 and WMT 103 or equivalent with a grade of Pass or "C" or higher.
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 4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 102, WMT 103, and WMT 132 or equivalent with grades of Pass or "C" or higher.
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 2 times.

Transfer Credit: CSU

WMT 248
PRODUCTION FURNITURE MAKING AND MANUFACTURING 4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: WMT 102 and WMT 103 or equivalent with grades of Pass or "C" or higher.
The course enables students to work as a team in the manufacturing of a limited edition of student-designed furniture items. The
course includes all the steps from setting up a furniture plant to building a finished furniture product. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

WMT 249L
FURNITURE MANUFACTURING
SPECIALTY 2.5 UNITS
Class hours: 8.0 Laboratory
Prerequisite: WMT 102 or WMT 103 or equivalent with a grade of Pass or "C" or higher.
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 4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 151 and WMT 181 or equivalent with grades of Pass or "C" or higher, or appropriate work experience.
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 2 times.
Transfer Credit: CSU

WMT 251
ADVANCED FACEFRAME CABINETMAKING 4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 250 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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 inset door fabrication, 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 2 times.
Transfer Credit: CSU

WMT 252
INTERMEDIATE 32 MM SYSTEM CABINETMAKING 4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 153 and WMT 181 or equivalent with grades of Pass or "C" or higher, or appropriate work experience.
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 focused on production techniques and the safe use of computerized numerical control panel processing machinery. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 253
ADVANCED 32MM SYSTEM OF CABINETMAKING 4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 252 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
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 2 times.
Transfer Credit: CSU

WMT 258
MANTELS AND WALL SYSTEMS 4.0 UNITS
Class hours: 2.5 Lecture/5.5 Laboratory
Prerequisite: WMT 102, 103, or WMT 151 or equivalent with a grade of Pass or "C" or higher.
This course introduces the student to the methods, materials, tools, and machinery used in the design, and manufacturing and installation of mantels and wall systems. Topics will include the history, design, and milling, 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: 8.0 Laboratory
Prerequisite: WMT 159 or equivalent with a grade of Pass or "C" or higher.
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 268A
PRODUCTION CABINETMAKING (COMMERCIAL/INSTITUTIONAL) 5.0 UNITS
Class hours: 4.0 Lecture/4.0 Laboratory
Prerequisite: WMT 151 or WMT 153 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
Corequisite: WMT 250 or WMT 252.
Recommendation: WMT 154, WMT 155, WMT 181
This course enables the students to work as a team in the design, manufacturing, and installation of cabinets and fixtures for on-campus use. This course includes instruction in production techniques, materials science, cost estimating, time management, and scheduling. This course specializes in the fabrication and installation of cabinetry and fixtures in the category of institutional or commercial production. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

WMT 268B
PRODUCTION CABINETMAKING AND MANUFACTURING (RESIDENTIAL) 5.0 UNITS
Class hours: 4.0 Lecture/4.0 Laboratory
Prerequisite: WMT 151 or WMT 153 or equivalent with a grade of Pass 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) 5.0 UNITS
Class hours: 4.0 Lecture/4.0 Laboratory
Prerequisite: WMT 151 or WMT 153 or equivalent with a grade of Pass 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 course may be taken a maximum of 2 times.

Transfer Credit: CSU

WMT 269L
CABINETMAKING MANUFACTURING SPECIALTY 2.5 UNITS
Class hours: 8.0 Laboratory
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: 2.0 Lecture/2.0 Laboratory
Prerequisite: WMT 181 or equivalent with a grade of Pass or "C" or higher.

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 for a maximum of 2 times

Transfer Credit: CSU

ZOOL 120
INTRODUCTION TO ANIMAL BIOLOGY 4.0 UNITS
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: Satisfactory completion of the English Placement Process or ENGL 52 or equivalent with a grade of Pass or "C" or higher.

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

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NON-CREDIT COURSES

ADULT EDUCATION CLASSES

AED 5.05
WORD PROCESSING 0 UNIT
Class hours: 10 lecture
This course is designed to provide an intro-duction to Word Processing. The course will give the student a working knowledge of the theory of Word Processing through the use of Word Processing Equipment. Emphasis will be on fundamental operations, power typing, and practical application of functions learned.

AED 5.08
MULTI-CLERICAL SKILLS 0 UNIT
Class hours: 2 lecture/2 lab
This is a course designed for currently disabled students who have therapeutic or vocational skill-building needs. The content offered, dependent upon the individual’s need and abilities, will range from basic concepts and skills to the development of personal and job-related skills.

AED 10.01
EXERCISE FOR SENIORS 0 UNIT
Class hours: 2 lecture/4 lab
This course enables students to increase and maintain flexibility and strength, develop and maintain good posture, cardiovascular awareness and fitness, and develop skills for stress management. This course may be repeated.

AED 10.03
WALK DON’T RUN 0 UNIT
Class hours: .75 lecture/.75 lab
The student will learn to use walking as a viable form of exercise. He will learn to warm-up for his exercise program, recognize danger signals, increase his strength and endurance. Selecting proper footwear for exercise and daily use will be part of the lecture series.

AED 10.06
MUSIC EXPERIENCE FOR SENIORS 0 UNIT
Class hours: 1 lecture/1 lab
This course will focus on students learning about music, old and new, through listening, discussions, and activities. This course may be repeated.

AED 10.07
PHYSICAL FITNESS FOR OLDER ADULTS 0 UNIT
Class hours: 5 lecture/1.0 lab
This course is designed for adults with or without physical limitations. Non-strenuous, rhythmic exercises, adapted to physical abilities of participants, will be taught. Participants create and maintain a positive self-image toward health and life through a planned physical fitness program.

AED 10.08
EXERCISE FOR ADULTS 0 UNIT
Class hours: 9 lecture/27 lab
This course is designed to enable students to increase and maintain muscular flexibility and strength, develop and maintain good posture, cardiovascular awareness and fitness, and develop skills for stress management.

AED 10.09
AEROBICS FOR SENIORS 0 UNIT
Class hours: 9 lecture/27 lab
A slow cardiovascular workout for seniors, combining low-impact aerobics, walking, stretching, and strengthening of major muscle groups.

AED 10.10
MOVEMENT INTO FITNESS 0 UNIT
Class hours: 5 lecture/1.5 lab
This fitness program is designed for older adults to increase flexibility and strengthen major muscle groups. This course may be repeated.

AED 10.11
LIGHT WEIGHTS FOR SENIORS: CONDITIONING IN THE GYM 0 UNIT
Class hours: 3 lab
An introduction to the use of light weights and weight machines in the gym to condition that various muscle groups of the body. The course is designed specifically for senior citizens.

AED 10.12
DEFENSE AWARENESS FOR SENIORS 0 UNIT
Class hours: 1 lecture/1 lab
This course is designed to teach senior citizens how to feel in control of their environment by highlighting everyday, natural movements and how to use them to enhance their safety and well-being.

AED 11.05
REFLEXOLOGY - LOVE YOUR FEET 0 UNIT
Class hours: 1 lecture/1 lab
Learn foot massage and reflexology in this "hands-on" class. Learn how this ancient art relieves discomfort and improves circulation by massaging points on the ankles, heels, and soles of the foot.

AED 11.06
MASSAGE FOR OLDER ADULTS 0 UNIT
Class hours: 1 lecture/1 lab
Learn Acupressure, hand, foot and ear reflexology and basic Swedish massage strokes that can ease muscular tension, increase flexibility and joint mobility, as well as enhance cardiovascular and lymph circulation and relieve physical, emotional and mental stress. This course may be repeated.

AED 11.08
STRESS MANAGEMENT FOR OLDER ADULTS 0 UNIT
Class hours: 1 lecture/1 lab
This course will take an experiential approach in exploring the causes, effects, and management techniques of age-related stress. A discussion will precede special group participatory exercises designed to excite the learning of personal themes of stress and coping, and also to acquaint members in the class with one another. Stress management techniques, such as biofeedback, meditation, visualization, and cognitive therapy will also be introduced in lecture, and then practiced in class. Further elaboration may be given through films, and guest lectures in the field.

AED 11.10
PERSONAL CARE FOR OLDER ADULTS 0 UNIT
Class hours: 2.5 lecture
This class is designed for the senior citizen to learn to cope with and overcome barriers, created by age and physical limitations, in caring for their personal needs.

AED 14.03
SENIOR CITIZENS MELODRAMA 0 UNIT
Class hours: 54 lecture
This is a class for older adults who would like to give a little acting a try. Although no experience is necessary, an interest in a new experience is encouraged. The class will explore short theatre sketches for small groups, some old fashioned melodrama, and some original skits. Writers, readers, singers, non-signers are all welcome.
AED 14.06
TAP DANCE FOR OLDER ADULTS 0 UNIT
Class hours: .50 lecture/1.50 lab
Recommendation: Participants must be age 62 or older
Learn the fundamentals of tap dance in this class for older adults. Shuffle-ball-change, waltz clog, time step, gigs, chugs, and flaps, are just a few of the steps you'll learn in a new tap routine each week.

AED 14.07
MUSIC APPRECIATION FOR SENIORS 0 UNIT
Class hours: 1 lecture/1 lab
Music program designed to encourage verbal expression, physical movement, and social interaction through song and music listening.

AED 14.08
CREATIVE ARTS & CRAFTS FOR OLDER ADULTS 0 UNIT
Class hours: 2 lab
This course explores a variety of craft projects. Students will make decorative as well as functional items. Projects will depend on the skill level of the group and range from simple paste-up techniques to creation of original art forms, such as sculpture, painted items or original designs.

AED 14.09
ARTS & CRAFTS FOR ADULTS 0 UNIT
Class hours: 2 lab
Students will explore various painting and drawing media, such as watercolors, charcoal, acrylics or combinations of media. (Media will depend upon student's skill level.) Expression will be emphasized as well as technique. This course maybe repeated.

AED 14.10
CRAFTS FOR SENIORS 0 UNIT
Class hours: 1 lecture/1 lab
This course is designed to teach basic techniques and skills involved in creative crafts while at the same time enhancing the coordination of sensory, gross and fine motor skills.

AED 14.11
QUILTING FOR SENIORS 0 UNIT
Class hours: 2 lecture/2 lab
A quilting frame for the old time "quilting bee" atmosphere is center stage for class. Senior citizen students can participate in hand quilting, quilting restoration, block/fabric exchanges and many other activities. This class will allow time for completion of projects. Sewing machine and all necessary items will be brought on an individual basis for those students wanting to sew during class time. This course may be repeated.

AED 14.12
RADIO AS ART: THE HISTORY AND APPRECIATION OF RADIO 0 UNIT
Class hours: 3 lecture
Excerpts from early radio shows together with lectures and guest speakers help to relive radio's beginnings as the golden age of radio is remembered. Radio has deeply affected American politics, business and entertainment. This course traces the historical development of the medium from its inception to the 1950's.

AED 16.10
SENIOR CHORUS 0 UNIT
Class hours: 1 lecture/2 lab
This course will examine the fundamentals of vocal techniques for larger groups including proper warm-up techniques, vocal pedagogy, physiology of singing, musicianship, performance techniques and instructor-guided practice. Emphasis will be placed upon correct singing, department, posture, breathing, musical interpretation, correct pitch, rhythmic accuracy, and correct musical style, and correct practices for singing in groups with piano accompaniment. This course may be repeated.

AED 16.11
COMMUNITY BAND FOR OLDER ADULT 0 UNIT
Class hours: 1 lecture/2 lab
Recommendation: Learner must be 55 years of age.
Instruction in ensemble techniques that include rehearsal format, performance preparation, and performance execution. Emphasis is placed upon group participation, interdependence/reliability, social interaction, quality use of leisure time, and personal enrichment and growth through artistic performance in public.

AED 16.12
VOCAL ARTS WORKSHOP FOR SENIORS 0 UNIT
Class hours: 1.5 lecture/1.5 lab
This course will examine the fundamentals of vocal techniques for four-part groups including proper warm-up techniques, vocal pedagogy, and physiology of singing, musicianship, performance techniques and instructor-guided practice, and learning and singing a four-part harmony. This course may be repeated.

AED 16.13
COOKING FOR SENIORS 0 UNIT
Class hours: .5 lecture/1.5 lab
This course enables senior citizen students to prepare basic meals and desserts through observation of the instructor's procedures. Each class will cover the importance of nutrition in meal preparation and how nutrition is important in maintaining healthy cholesterol levels, blood pressure and an overall healthy body. The senior citizen students will learn to select well-balanced meals, whether the meals are purchased or prepared at home. This course may be repeated.
Announcement of Courses

AED 36.01 OCCUPATIONAL ORIENTATION/ PREPARATION 0 UNIT
Class hours: 4 hours (open entry/open exit)
The Occupational Orientation/Preparation course is designed to awaken an interest in the world of work for students. The goal of the course is to build a broad range of knowledge in basic job competencies, evaluate personal abilities in either part-time or full-time employment. The course will expose students to a wide scope of knowledge in basic job proficiencies. The course will allow students to acquire skills that will allow them to be competitive in the job market.

AUTO 39.01 INTRODUCTION TO PAINTING/ COATING/DECORATING TRADES 0 UNIT
Class hours: 40 lecture
This course is the introductory or beginning course in a series of specialty courses for apprentices involved in the painting/coating/decorating industry. Emphasis will be placed on careers and the safety regulations of this specialty industry. Demonstrations will cover basic surface preparation and application of water-based paints and coatings.

AED 39.02 PROFESSIONALISM IN THE PAINTING TRADES/ JOB PLANNING AND SURFACES 0 UNIT
Class hours: 24 lecture/16 lab
Prerequisite: Completion of AED 39.01 or consent of department
This course is the second in a series for apprentices involved in the painting/coating/decorating industry. Specialty topics like professionalism, job planning, ladders and scaffolds, surface identification and preparation, area protection and interior and exterior painting methods will be included. Lecture and demonstration will cover surface preparation and application of materials.

AED 39.03 INTRODUCTION TO PAINTS, COATINGS, SEALANTS, REPAIRS AND FILLERS, AND SURFACE CONDITIONS 0 UNIT
Class hours: 40 lecture
Prerequisite: Completion of AED 39.02, 39.01 or consent of department
This course is the third in a series for apprentices involved in the painting/coating/decorating industry. The specialties of paints and coatings, brushing and rolling paints and coatings, sealants and repair/fillers, and surface materials and conditions will be included.

AED 39.04 INTERIOR AND EXTERIOR PROJECTS AND SAFETY 0 UNIT
Class hours: 40 lecture
Prerequisite: Completion of AED 39.03, 39.02, 39.01 or consent of department
This is fourth course in a series of specialty courses developed for apprentices in the painting and decorating industry. Emphasis will be placed on application techniques for interior and exterior projects. Lectures and demonstrations will be included in the area of flat and enamel coatings for an interior and exterior surfaces. Jobsite cleanup will be addressed.

AED 39.05 JOB PLANNING FOR PAINTING/COATING/ DECORATING TRADES 0 UNIT
Class hours: 32 lecture/8 lab
Prerequisite: Completion of AED 39.04, 39.03, 39.02, 39.01 or consent of department
This is the fifth course in a series of specialty courses developed for apprentices in the painting and decorating industry. Emphasis will be placed on job planning for the painting and decorating industry, including lectures and demonstration in the areas of job safety, materials planning, equipment planning and important factors related to paint failures and remedies. Lecture and demonstrations will cover abrasive blasting, chemical cleaning and stripping, low pressure washing, paint failures, stains, clear finishes and wood finishes.

AED 39.06 CLEAR FINISHES, COATINGS, SPRAY PAINTING, DRYWALL AND SPECIALTY COATINGS 0 UNIT
Class hours: 24.0 Lecture/16.0 lab
Prerequisite: Complete AED 39.05, 39.04, 39.03, 30.02, 39.01 or consent of department
This is the sixth course in a series of specialty courses for apprentices involved in the painting/coating/decorating industry. Emphasis will be placed on clear finishes application and types of coatings. Lectures and demonstrations will include topics of airless spray painting, drywall finishing and patching and specialty coating applications.

AED 39.07 WALLCOVERINGS, DECORATIVE FINISHES, HVLP AND BRUSH AND ROLL 0 UNIT
Class hours: 16.0 Lectures/24.0 lab
Prerequisite: Completion of AED 39.06, 39.05, 39.04, 39.03, 39.02, 39.01 or consent of department
This is the seventh course in a series of specialty courses for apprentices involved in the painting/coating/decorating industry. Emphasis will be placed on wall coverings, decorative finishes, and interior brush and roll.

AED 39.08 APPLICATION AND PREPARATION, FAILURES AND REMEDIES AND EXTERIOR BRUSH AND ROLL 0 UNIT
Class hours: 24.0 lecture/16.0 lab
Prerequisite: Completion of AED 39.07, 39.06, 39.05, 39.04, 39.03, 39.02, 39.01 or consent of department
This is the eighth course in a series of specialty courses for apprentices involved in the painting/coating/decorating industry. Emphasis will be placed on brush and roll painting of exterior surfaces and the application/preparation related to paint failures and remedies. This will include lectures and demonstrations in the areas of coatings, brush and roll techniques, and safety.

AED 39.09 PROFESSIONALISM, JOB SUPERVISION, PLANNING AND CONTROL, COLOR TINTING AND WALLCOVERINGS 0 UNIT
Class hours: 20.0 lecture/20.0 lab
Prerequisite: Completion of AED 39.08, 39.07, 39.06, 39.05, 39.04, 39.03, 39.02, 39.01 or consent of department
This is the ninth course in a series of specialty courses for apprentices involved in the painting/coating/decorating industry. Emphasis will be placed on color matching, trade mathematics and measurement. This will include lectures and demonstrations in the areas of trade history and achievements, special applications of mathematics, color matching, job supervision, planning and control, color tinting and wall covering. Discussions will also cover the requirements for coating old work as compared to new work.

AED 39.10 TEXTURING, SPRAYING WITH SPECIAL AND ELECTRONIC DEVICES, WOOD FINISHING 0 UNIT
Class hours: 20.0 lecture/20.0 lab
Prerequisite: Completion of AED 39.09, 39.08, 39.07, 39.06, 39.05, 39.04, 39.03, 39.02, 39.01 or consent of department
This is the tenth course in a series of specialty courses for apprentices involved in the painting/coating/decorating industry. Emphasis will be placed on texturing, spraying with special devices, and wood finishing. Lecture and demonstrations will include HVLP spray systems, equipment and application, wall coverings, decorative finishes, and interior brush and roll.
text for the ironworkers apprentice. The course will acquaint the ironworker with the privileges and obligations he/she accepts as members of this trade.

AED 40.09
GENERAL RIGGING – REINFORCING  0 UNIT
Class hours: 30 lecture/20 lab
Prerequisite: Must be registered apprentice with the California State Division of Apprenticeship Standards. Applicant must attend the eight-hour Introduction to Apprenticeship class.
This course introduces the proper application of fiber line, steel cable, and chain in various tackle and lever combination used in raising, transporting, and storing heavy loads. It provides instruction and manipulative experience with the various types of rigging equipment and procedures used in the ironworkers' trade.

AED 40.10
WELDING I – REINFORCING  0 UNIT
Class hours: 24 lecture/26 lab
Prerequisite: Must be registered apprentice with the California State Division of Apprenticeship Standards. Applicant must attend an eight-hour Introduction to Apprenticeship class.
This course introduces basic understanding of the structure of ferrous metals and their reactions to heat. It provides knowledge and basic skills in the equipment and materials employed in the use of shielded metal-arc, gas shielded-arc, and oxy-acetylene welding.

AED 40.11
WELDING II – REINFORCING  0 UNIT
Class hours: 40 lecture/10 lab
Prerequisite: Must be registered apprentice with the California State Division of Apprenticeship Standards. Applicant must attend an eight-hour Introduction to Apprenticeship class.
This course will introduce the apprentice to a basic understanding of the structure of ferrous metals and their reactions to heat. It provides knowledge and basic skills in the equipment and materials employed in the use of shielded metal-arc, gas shielded-arc, and oxy-acetylene welding.

AED 40.12
REINFORCING IRON I  0 UNIT
Class hours: 38 lecture/12 lab
Prerequisite: Must be registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the required eight-hour Introduction to Apprenticeship class.
This course will provide the ironworker with the ability to interpret the standard codes, code classifications, plans, schedules, charts and specifications in common use by the ironworker. The apprentice will become familiar with the contraction techniques used in reinforcing concrete members with steel. They will become familiar with the use of bar supports, placement of reinforcing iron in the structural members of buildings and in structures other than buildings, general principles of bar splicing and welding, post tensioning and prestressing.

AED 40.13
REINFORCING IRON “A”  0 UNIT
Class hours: 45 lecture
This course will provide the ironworkers reinforcing apprentice with the ability to interpret the standard codes, code classifications, plans, schedules, charts and specifications in common use by the ironworker. The apprentice will become familiar with the construction techniques used in reinforcing concrete members with
This course will train students in the installation of multi-strand post-tension bar systems, including stressing, grouting, and inspection. Students will become familiar with related topics to post-tension bar systems, which share many of the same procedures and characteristics. This course will cover various types of structures, including bridges, buildings, and storage tanks.

AED 40.15 POST – TENSION I 0 UNIT
Class hours: 38 lecture/12 lab
Prerequisite: Must be registered apprentice with the California State Division of Apprenticeship Standards. Applicant must attend the eight-hour Introduction to Apprenticeship class
This course will train students in the installation of multi-strand post-tension bar systems, including stressing, grouting, and inspection. Students will become familiar with related topics to post-tension bar systems, which share many of the same procedures and characteristics. This course will cover various types of structures, including bridges, buildings, and storage tanks.

AED 40.17 REINFORCING IRON D 0 UNIT
Class hours: 45 lecture
This course will provide the ironworkers reinforcing apprentice with the ability to interpret the standard codes, code classifications, plans, schedules, charts and specifications in common use by the ironworker. The apprentice will become familiar with the construction techniques used in reinforcing concrete members with steel. He will become familiar with the uses of bar supports, placement of reinforcing iron in the structural members of building and in structures other than buildings, general principles of bar splicing and welding, post tensioning and prestressing.

AED 40.18 GENERAL RIGGING – STRUCTURAL 0 UNIT
Class hours: 30 lecture/20 lab
Prerequisite: Must be registered apprentice with the California State Division of Apprenticeship Standards. Applicant must attend the eight-hour Introduction to Apprenticeship class
This course introduces the proper application of fiber line, steel cable, and chain in various tackle and lever combinations used in raising, transporting, and storing heavy loads. It provides instruction and manipulative experience with the various types of rigging equipment and procedures used in the ironworkers' trade.

AED 40.19 WELDING I – STRUCTURAL 0 UNIT
Class hours: 10 Lecture/40 lab
Prerequisite: Must be registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course introduces the proper application of fiber line, steel cable, and chain in various tackle and lever combinations used in raising, transporting, and storing heavy loads. It provides instruction and manipulative experience with the various types of rigging equipment and procedures used in the ironworkers' trade.

AED 40.20 WELDING II – STRUCTURAL 0 UNIT
Class hours: 10 Lecture/40 lab
Prerequisite: Must be registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course introduces the proper application of fiber line, steel cable, and chain in various tackle and lever combinations used in raising, transporting, and storing heavy loads. It provides instruction and manipulative experience with the various types of rigging equipment and procedures used in the ironworkers' trade.

AED 40.21 STRUCTURAL I 0 UNIT
Class hours: 36 Lecture/14 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course provides hands-on experience in erecting a pre-engineered metal building. The course will provide the apprentice with necessary time to perform the tests needed in interpreting charts and tables, blueprint, assembly of prefab buildings.

AED 40.22 STRUCTURAL III 0 UNIT
Class hours: 36 Lecture/14 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course promotes understanding of both theory and practice built around the study of blueprint reading, structural erection procedures, and proper construction of various steel structures.

AED 40.26 METAL BUILDING ERECTION I 0 UNIT
Class hours: 36 Lecture/14 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course promotes understanding of both theory and practice built around the study of blueprint reading, structural erection procedures, and proper construction of various steel structures.

AED 40.27 IWS – WELDING FOR SHOP IRONWORKERS I 0 UNIT
Class hours: 18 lecture/36 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards.
This is a first-semester course for the Ironworker Shop person, with emphasis on the use of both AC and DC welding currents, as well as the use of the major classifications of electrodes. Welding is done in the flat, vertical, and horizontal positions. Related technical subjects cover arc, resistance welding, testing, heating-treatment, joint design, and nomenclature.
Announcement of Courses

AED 40.28  
IWS-WELDING FOR SHOP  
IRONWORKERS II 0 UNIT  
Class hours: 18 lecture/36 lab  
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards.  
This is a second-semester course for the Apprentice in arc welding.  
Topics covered include: Welding Machines and Accessories, Arc Welding Procedures, Cutting and Welding.

AED 40.29  
IWS-EMPLOYER/EMPLOYEE RELATIONS, SAFETY AND FIRST AID 0 UNIT  
Class hours: 54 lecture  
This course is designed to meet the needs of State Indentured Apprentices employed full time in the Steel Fabricating Industry.  
Topics covered include: Introduction to Apprenticeship, Labor-Management Relations, Collective Bargaining agreements, Safety and First Aid.

AED 40.30  
IWS-FUNDAMENTALS OF WELDING FOR STEEL FABRICATING 0 UNIT  
Class hours: 54 lecture  
This course is designed to meet the needs of State Indentured Apprentices employed full time in the Steel Fabricating Industry.  
Topics covered include: Welding Machines and Accessories, Arc Welding Procedures, Cutting and Welding.

AED 40.34  
IWS-STRUCTURAL STEEL LAYOUT 0 UNIT  
Class hours: 18 lecture/36 lab  
This course will provide the Apprentice with knowledge of layout, tools, methods, dimensioning, and techniques used in fabricating structural steel.

AED 40.35  
IWS-STRUCTURAL STEEL FITTING 0 UNIT  
Class hours: 18 lecture/36 lab  
This course will provide the Apprentice with the operations of plate work and development, including various structural steel assemblies.

AED 40.36  
IWS-ADVANCED BLUEPRINT READING 0 UNIT  
Class hours: 18 lecture/36 lab  
This course will provide the Apprentice with knowledge of working sectional, exploded, and erection drawings.

AED 40.37  
IWS-JOURNEYMEN PROJECTING 0 UNIT  
Class hours: 18 lecture/36 lab  
This course will provide the Apprentice with knowledge of working sectional, exploded, and erection drawings.

AED 40.50  
IW MIXED BASE – REINFORCING 0 UNIT  
Class hours: 38 Lecture/12 lab  
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class  
This course will acquaint the apprentice with specifications that constitute a safe and healthful working environment under OSHA. It provides an introduction to the rights and obligations that this act imposes.  
The apprentice with have an overview of construction blueprints commonly used with emphasis on its function and interpretation.  
This course offers a brief review of the basic math skill and the opportunity to apply these skills in solving typical problems that are apt to arise in the construction trades.

AED 40.51  
IW-MIXED BASE-REINFORCING 0 UNIT  
Class hours: 13.5 lecture/9 lab  
This course provides the Apprentice with experience and knowledge of pre-engineering metal buildings. The course emphasizes sheet metal sections, fasteners, footings, and installation.

AED 40.52  
IW – ORIENTATION II 0 UNIT  
Class hours: 27 Lecture/27 lab  
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class  
This course provides an overview of the skill and knowledge needed to become a safe and productive working apprentice. It will provide a hands-on approach to general, rigging, structural steel, welding and burning, and reinforcing iron.

AED 40.53  
DETAILING FOR REINFORCING IRON 0 UNIT  
Class hours: 40 Lecture/10 lab  
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class  
This course instructs the apprenticeship student about the history of the Ironworker union from its birth in 1896 to present.

This course will provide insight into the job performed by the detailer of reinforcing iron. Content includes reading and interpreting the communication instruments that are the products of the detailer's skills such as placing drawings, the bar lists, the bar schedules. These are the instruments that guide the fabrication of reinforcing bars in the shop and their proper placement in the field. This class shows how these documents are assembled and from what sources information is derived. Mechanical drawings, math computation skills, and blueprints are covered.

AED 40.54  
DETAILING II – REINFORCING 0 UNIT  
Class hours: 40 Lecture/10 lab  
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class  
This course will provide knowledge, procedures and practices employed by the detailer of reinforcing iron in the preparation of placing drawings and bar list. In addition, the class places particular emphasis on analysis and interpretation of placing patterns and practices in the erection of a wide variety of reinforced concrete structures.

AED 40.55  
IW – FOREMAN – SCAFFOLD ERCTOR DISMANTLER – FORKLIFT 0 UNIT  
Class hours: 40 Lecture/10 lab  
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class  
This course is designed to heighten the construction worker's awareness regarding on-the-job hazards. The student will receive training in accordance with OSHA standards and the many aspects of safety, compliance, scheduling, jurisdiction, and the labor law. The student will receive instruction regarding the duties of the ironworker foreman, general foreman, and superintendent's and forklift operation.

AED 40.56  
IW IRONWORKERS HISTORY REINFORCING 0 UNIT  
Class hours: 40 Lecture/10 lab  
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class  
This course will provide insight into the job performed by the detailer of reinforcing iron. Content includes reading and interpreting the communication instruments that are the products of the detailer's skills such as placing drawings, the bar lists, the bar schedules. These are the instruments that guide the fabrication of reinforcing bars in the shop and their proper placement in the field. This class shows how these documents are assembled and from what sources information is derived. Mechanical drawings, math computation skills, and blueprints are covered.
AED 40.57
IW LEAD HAZARD – REINFORCING 0 UNIT
Class hours: 40 Lecture/10 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
The purpose of this course is to train ironworkers who are exposed to lead in the repair and renovation of bridges or steel structures, or in the demolition of buildings and other structures. Construction work on bridges, steel structures, and demolition, where lead-containing materials are present, is particularly hazardous. Exposures to lead in this kind of construction work is quite hazardous, with exposures often exceeding the OSHA exposure limits by more than one hundred times that which is allowable. This course will stress the health effects caused by lead exposure, OSHA regulations in this regard, sampling methods, legal rights of workers and the use of proper protective equipment and work methods.

AED 40.60
IW ARCHITECTURAL AND ORNAMENTAL I 0 UNIT
Class hours: 36 Lecture/14 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course is designed primarily for ironworker apprentices and will provide a detailed understanding of procedures and practices employed by the ironworker in architectural and ornamental ironworking. Special emphasis is placed on the tools, anchors, and fasteners in constructing curtain walls and window walls.

AED 40.61
IW PRECAST CONCRETE – STRUCTURAL 0 UNIT
Class hours: 30 Lecture/20 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course provides knowledge, coordination task elements and skill needed in the staging and economical erection of a precast concrete building, placing particular emphasis on the rigging, handling and installing of the precast concrete members themselves.

AED 40.62
IRONWORKER HISTORY STRUCTURAL 0 UNIT
Class hours: 40 Lecture/10 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course deals with the history of the Ironworkers Union from its birth in 1896 up to the present time.

AED 40.63
IW LEAD HAZARD – STRUCTURAL 0 UNIT
Class hours: 32 Lecture
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course will teach ironworkers to recognize and reduce hazards related to lead when repairing and renovation of bridges or steel structures, or in the demolition of buildings and other structures. It will stress the health effects caused by lead exposure, OSHA regulations in this regard, sampling methods, legal rights of workers and the use of proper protective equipment and work methods.

AED 40.64
IW OSHA 0 UNIT
Class hours: 14 Lecture
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course is designed to heighten the construction workers’ awareness regarding on-the-job hazards. Upon completion, workers will be able to modify their current work behavior and/or learn new ones thus effectively reducing the frequency and severity of incidents and injuries.

AED 41.03
IW – REINFORCING II 0 UNIT
Class hours: 40 Lecture/10 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course provides the ironworker student with training in reinforcing concrete, including manufacturing, safety, reinforcing forms, bridge, and highway construction, bending, tagging, marking, and fabricating. This course delineates as precisely as possible the industry practices for reinforcing steel and provides a convenient reference source for the architect/engineer, the inspector, the detailer, fabricator, and ironworker.

AED 41.04
IW ARCHITECTURAL II 0 UNIT
Class hours: 30 Lecture/20 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course teaches the ironworker on how to erect storefronts and entrance ways and how to install the various types for doors commonly found in today’s modern structures. The student will be introduced to the various types of materials used and the installation procedures recommended. This course will also cover installing revolving doors, swinging doors and closers, sliding fronts and doors, hollow metal doors, and balanced doors. The student will learn how to erect a wide variety of doors, stairs, handrails, and ladders, toilet partitions, vanity supports, relief angles, and flagpoles and how to install chain link fences.

AED 41.05
IW – ARCHITECTURAL II 0 UNIT
Class hours: 30 Lecture/20 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course teaches the ironworker the many tasks involved in the construction of window wall and curtain wall systems. The student will be introduced to the many techniques used to provide a functioning, yet aesthetically pleasing structure. The students will learn about new construction techniques regarding designs of exterior facing structure enclosure and protection. This class will provide information on building sealants and the effects of weathering.

AED 41.06
IW – STRUCTURAL II 0 UNIT
Class hours: 30 Lecture/20 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicants must attend the eight-hour Introduction to Apprenticeship class
This course provides the student with training in structural steel erection including history, safety, planning and scheduling, handling materials, and erecting structural steel members.
Announcement of Courses

**AED 41.07**
**POST – TENSION II** 0 UNIT
Class hours: 40 Lecture/10 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicant must attend the eight-hour Introduction to Apprenticeship class.
This course is designed to provide the ironworker student with training in post-tensioned reinforcing, including single-strand unbonded systems and bar post-tensioning. This course is structured to prepare the student for the Post-Tensioning Installation (PTI) certification, which will enable workmen to install single-strand unbonded tendons on superstructures. Students will learn the principles and theories of post-tensioning and identify the components of single-strand unbonded tendon system and bar post-tensioning systems. Students also learn the use of tools, equipment, and procedures to unload, handle, layout, install, stress, grout, and finish each type of post-tensioning system.

**AED 41.08**
**POST – TENSION III** 0 UNIT
Class hours: 40 Lecture/10 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicant must attend the required eight-hour Introduction to Apprenticeship class.
This course provides the ironworker student with training in post-tensioned reinforcing, including single-strand unbonded systems and bar post-tensioning. This course is structured to prepare the student for the Post-Tensioning Installation (PTI) certification, which will enable workmen to install single-strand unbonded tendons on superstructures. Students will learn the procedures of detensioning and perform lift-offs on post-tensioning systems. Students will learn the use of equipment, procedures to unload, handle, layout, install, stress, grout, and finish each type of post-tensioning system.

**AED 41.09**
**WELDING III – REINFORCING** 0 UNIT
Class hours: 40 lecture/10 lab
Prerequisite: Must be a registered apprentice with the California State Division of Apprenticeship Standards. Applicant must attend the required eight-hour Introduction to Apprenticeship class.
This course will introduce the apprentice to shop safety in welding and burning. It provides a basic understanding of the structure of ferrous metals and their reactions to heat. It provides knowledge of the equipment and materials employed in the use of oxy-acetylene burning and welding. Students will learn the symbols used in welding. This course will prepare the student for the Los Angeles City written welding exam.

**AED 42.00**
**ENGLISH AS A SECOND LANGUAGE** 0 UNIT
Class hours: 3 lecture
Prerequisite: None
This course is designed to prepare the limited English-speaking person for college ESL study. It bridges the gap between life skills English and beginning college ESL courses. It is multi-skills oriented, aiming at speaking and listening, reading and writing, and grammar skills.

**AED 42.01**
**ENGLISH AS A SECOND LANGUAGE – A** 0 UNIT
Class hours: 6 lecture
Open entry/Open exit
This course is designed to prepare the limited English-speaking adult for college ESL study. It bridges the gap between life skills English and beginning college ESL courses. It is multi-skills oriented, aiming at speaking and listening, reading and writing, and grammar skills.

**AED 42.02**
**MEDIATION IN BASIC SKILLS** 0 UNIT
Class hours: 18 lecture/36 lab
This course is designed for students who require mediation between verified learning disabilities and basic skill subjects including Reading, Mathematics, and English Composition. Specific assessment procedures will be utilized to isolate basic skill/learning process deficiencies which will then be addressed by individualized instruction.

**AED 42.03**
**SURVIVAL ENGLISH AS A SECOND LANGUAGE** 0 UNIT
Class hours: 6 lecture
This first course in a series is designed as a survival-level English language course for those students with no English language skills. All language learning skills will be utilized: reading, writing, listening, and speaking; the main focus will be on vocabulary building and listening as initial steps for building English language acquisition.

**AED 42.04**
**BASIC ADULT ENGLISH** 0 UNIT
Class hours: 5 lecture
This course is designed to prepare the adult student for college English, it is aimed at improving reading, writing, and grammar skills.
AED 42.12  
GED PREPARATION – A  0 UNIT  
Class hours: 6 lecture  
Open entry/Open exit  
Recommendation: 6 years of formal education  
This course will prepare students for the writing and social studies components of the GED examination. The General Education Department (GED) course consists of five examinations in the areas of writing skills, social studies, literature, the arts, and mathematics. Students will be tested on knowledge and skills that they have acquired from life experiences, television, radio, books and newspapers, consumer products, and advertising. Students will be prepared to take the battery of GED test.

AED 42.13  
GED TEST PREPARATION – B  0 UNIT  
Class hours: 6 lecture  
Recommendation: Completion of the sixth grade of equivalent  
This course will prepare students for the science, literature, and mathematics components of the GED examination. Students will be tested on knowledge and skills that they have acquired from life experience, television, radio, books and newspapers, consumer products, and advertising. Students will be prepared to take the battery of GED tests.

AED 43.03  
BUILT – UP ROOF ASSEMBLIES  0 UNIT  
Class hours: 3 lecture/1 lab  
Open entry/Open exit  
Prerequisite: Registered apprentice with the California State Division of Apprenticeship Standards, through the Independent Roofing Contractors of California, Inc., training program. Participants must be 18 years or older.  
This is a course in the preparation and application of built-up roofing assemblies and their related components.

AED 43.04  
COLD-APPLIED ROOFING SYSTEMS: WATERPROOFING AND DAMPROOFING  0 UNIT  
Class hours: 3 lecture/1 lab  
Prerequisite: Registered apprentice with the California State Division of Apprenticeship Standards, through the Independent Roofing Contractors of California, Inc., training program. Participants must be 18 years or older.  
This course is on preparation and application of cold-applied roofing systems and their related components.

AED 43.05  
ROOFING SHINGLES, TYPES AND APPLICATION  0 UNIT  
Class hours: 3 lecture/1 lab  
Prerequisite: Registered apprentice with the California State Division of Apprenticeship Standards, through the Independent Roofing Contractors of California, Inc., training program. Participants must be 18 years or older.  
This course covers the application and maintenance of various roofing shingles systems.

AED 43.06  
RIGID ROOFING  0 UNIT  
Class hours: 3 lecture/1 lab  
Prerequisite: Registered apprentice with the California State Division of Apprenticeship Standards, through the Independent Roofing Contractors of California, Inc., training program. Participants must be 18 years or older.  
The focus of this course is on the preparation and application of rigid roof materials, including mission tiles, roman tiles, concrete interlocking tile, slate and other rigid materials.

AED 43.07  
MAINTENANCE, REPAIRS AND REROOFING  0 UNIT  
Class hours: 3 lecture/1 lab  
Prerequisite: Registered apprentice with the California State Division of Apprenticeship Standards, through the Independent Roofing Contractors of California, Inc., training program. Participants must be 18 years or older.  
This course covers the maintenance, repair and re-roofing of built-up, hot and cold applied, shingle and rigid roofs.

AED 43.08  
PLANS AND SPECIFICATION  0 UNIT  
Class hours: 3 lecture/1 lab  
Open entry/Open exit  
Prerequisite: Registered apprentice with the California State Division of Apprenticeship Standards, through the Independent Roofing Contractors of California, Inc., training program. Participants must be 18 years or older.  
This course is on the development and application of plans, specifications, regulations, and cost estimating for the roofing and waterproofing industry.

AED 44.00  
MASONRY I  0 UNIT  
Class hours: 18 lecture/54 lab  
This course is an overview of the masonry trade, which includes the history and origin of masonry construction, tools and equipment, safety, fundamentals of mortar preparation and application, and the use of various masonry products.

AED 44.01  
MASONRY II  0 UNIT  
Class hours: 18 lecture/54 lab  
This course is a continuation in the study of the fundamentals of masonry construction.

AED 44.02  
MASONRY III  0 UNIT  
Class hours: 18 lecture/54 lab  
This course provides bricklaying students with material handling and storage procedures for advanced laying techniques, joints, corners and corner poles. Instruction is also provided in the handling and storage of brick and block, brick and Concrete Masonry Unit, control and expansion, joints and masonry.

AED 44.03  
MASONRY IV  0 UNIT  
Class hours: 18 lecture/54 lab  
This course provides bricklaying students with procedures for installing flashing and counter flashing and safety precautions when doing elevated masonry. Students will learn to read commercial and residential drawings, work in adverse weather conditions and apply masonry techniques to insulation, window and door openings piers, columns and pilasters.

AED 44.04  
MASONRY V  0 UNIT  
Class hours: 18 lecture/54 lab  
This course provides bricklaying students with basic procedures for working safely on walk and work surfaces, basic construction techniques for panels, prisms, arches, decorative pattern bonds, stone-work, and residential masonry.

AED 44.05  
MASONRY VI  0 UNIT  
Class hours: 18 lecture/54 lab  
This course provides masonry students with basic glass block, refractory masonry, structural glazed title, repair and restoration, panel construction, brick paving, and welding.

AED 48.01  
VOCATIONAL ENGLISH  0 UNIT  
Class hours: 18 lecture/54 lab  
Basic knowledge of fundamental grammar necessary for practical usage; spelling, punctuation, and minimum skill in writing and speaking necessary to communicate effectively and appropriately.
Announcement of Courses

AED 48.02
SENIOR BOOKS COME ALIVE 0 UNITS
Class hours: 27 lecture
This class will review and discuss the Great Modern classics, biographies of achievers, best sellers, and those never-to-be-forgotten books on the Westward Movement.

AED 48.03
CREATIVE WRITING FOR SENIORS 0 UNIT
Class hours: 2 lecture
This course is designed to introduce the older adult to techniques for creative writing in the areas of drama, poetry, fiction, and non-fiction. Techniques for a complete autobiography will be taught. This course may be repeated.

AED 48.04
COMMUNICATION SKILLS (OLDER ADULTS) 0 UNIT
Class hours: 1.5 lab
This course is designed to increase receptive and expressive language skills in the senior citizen, as well as improve non-verbal body language. The student will develop a higher level of self-confidence through positive interaction with other. This course may be repeated.

AED 49.01
VOCATIONAL MATH 0 UNIT
Class hours: 2 lecture/2 lab
This course is a study or review of the basic mathematical concepts and skills of whole numbers as they apply to monetary denominations: addition, subtraction, multiplication, and division. In addition, the course includes the meaning and use of fractions, working with decimals, using percents, solving problems with formulas, and figuring ratio, proportion and simple equations.

AED 49.02
VOCATIONAL ENGLISH AS A SECOND LANGUAGE 0 UNIT
Class hours: 4.5 hours
This course is designed as a survey of work-related communication including nomenclature for the student with limited English language skills. Students will learn to recognize, produce and understand technical vocabulary utilizing language learning skills: speaking, listening, reading, and writing. Students will learn about the vocabulary and nomenclature, while increasing their English language acquisition by learning to ask and respond to questions related to the vocabulary and practice conversation on a variety of work related subjects. Students will expand their vocational kno-wledge via class discussions, reading print material, attending field trips, and by sharing their vocational experience with other students. This course is intended as preparation for future credit courses, vocational training, or increased vocational language acquisition for the work situation.

AED 49.03
VOCATIONAL ESL – B 0 UNIT
Class hours: 3 lecture
This course is designed to provide English Learners with continued exposure to essential Vocational English Skills. Students will be able to understand, utilize, and produce vocabulary, phrases, and paragraphs in the vocational context. Emphasis will be placed on the steps of the California Writing Process. Technology will also be a key element of the curriculum. VESL-B students will be required to implement computers in their coursework. Safety issues will be addressed as they pertain to the workplace.

AED 60.01
CITIZENSHIP 0 UNIT
Class hours: 4 lecture
Recommendation: Eligibility for naturalization
This course prepares students to take the written exam for U.S. citizenship. In addition, it assists them with completing the application for U.S. citizenship and in preparing for the oral interviews with the INS.

AED 80.01
INTRODUCTION TO CONSTRUCTION TRADE 0 UNIT
Class hours: 54 lecture/18 lab
This course is the introductory or beginning course for “first-period” apprentices in a series of specialty courses for electrical apprentices involved in the construction industry. Emphasis will be placed on safety and the overall aspects of this specialty industry.

AED 80.02
INTRODUCTION TO ELECTRICAL BLUEPRINTS 0 UNIT
Class hours: 72 lecture
Recommendation: AED 80.01
This is the second course in a series of specialty courses for electrical apprentices involved in the construction trades. Emphasis will be placed on electrical prints, drawings and symbols. Also types of information they can find on schematics, one-lines and wiring diagrams will be covered.

AED 80.03
ELECTRIC HYDRAULIC AND MECHANICAL THEORY 0 UNIT
Class hours: 72 lecture
Recommendation: AED 80.02
This course is the third in a series of specialty courses for electrical apprentices involved in the construction industry concerning the electrical area. Emphasis will be placed on alternating current, motors, grounding, conduit bending, boxes and fittings, conductor installations, and cable tray.

AED 80.04
ELECTRICAL INSTALLATIONS 0 UNIT
Class hours: 72 lecture
Recommendation: AED 80.03
This is the fourth course in a series of specialty courses for electrical apprentices involved in the construction industry. Emphasis will be placed on conductor termination's and splices, installation of electric services, circuit breakers and fuses, contractors and relays, and electric lighting.

AED 80.05
ELECTRICAL CALCULATIONS AND INSTALLATIONS 0 UNIT
Class hours: 72 lecture
Recommendation: AED 80.04
This is the fifth course in a series of specialty courses for electrical apprentices involved in the construction industry. Emphasis will be on load calculations (branch circuits), conductor selection and calculations, over current protection, raceways, box and fitting fill requirements, wiring devices, distribution equipment, and distribution system transformers.

AED 80.06
ELECTRICAL LIGHTING MOTORS AND HVAC SYSTEMS 0 UNIT
Class hours: 72 lecture
Recommendation: AED 80.05
This course is sixth in a series of specialty courses for apprentices involved in the construction industry. Emphasis will be on basic lighting, motor calculations, motor maintenance, motor controls, electricity in HVAC system, and hazardous locations.

AED 80.07
INDUSTRIAL LIGHTING LOAD AND THEORY 0 UNIT
Class hours: 72 lecture
Recommendation: AED 80.06
Number seven in a series of specialty courses for electrical apprentices involved in the construction industry. The emphasis is placed on load calculation-feeder and services,
commercial/industrial lighting, specialty lighting, stand-by and emergency systems, basic electronic theory, fire alarm system.

AED 80.08 ADVANCED THEORY AND APPLICATIONS 0 UNIT
Class hours: 72 lecture
Recommendation: AED 80.07
This course introduces the Electrical Systems Technician III program.

AED 80.09 CPR AND FIRST AID 0 UNIT
Class hours: 4.5 lecture/4.5 lab
Prerequisite: Registered apprentice with the California State Divisions of Apprenticeship Standards, through the Associated Builders and Contractors, Southern California Chapter's training program.

AED 80.10 SHEET METAL I 0 UNIT
Class hours: 3 lecture/1 lab
Recommendation: Limitations on enrollment. Acceptance into the ABC – Sheet Metal Apprenticeship program.

AED 80.11 SHEET METAL II 0 UNIT
Class hours: 3 lecture/1 lab
This course covers problems involving the use of protractors, venier calipers and micrometers. Introduces the various types of pipe and fittings and discusses and describes the principles, uses and type of fitting for radial line development. It covers factors, calculations and precision necessary for proper bend allowance in sheet metal and application of materials and tools for soldering sheet metal parts and sealing seams. This course introduces techniques for reading blueprint specifications, and shop drawings. Sheet Metal and contracting manuals are exposed. The steps required for sizing ducts are identified. This course describes air distribution systems and their components, air flow measurement, duct-work installation principles, and the use psychometric charts. Information and learning activities for calculating downspout and gutter size are presented. Outlines of the principles of weather sealing and procedures for the fabrication and installation of selected flashing components are discussed.

AED 80.12 SHEET METAL III 0 UNIT
Class hours: 3 lecture/1 lab
Prerequisite: AED 80.11
This course covers the principles of air flow and components as applied to Heating, Ventilation, and Air Conditioning (HVAC) air distribution systems. It covers basic refrigeration cycles and affiliated components and controls needed in various refrigeration components. Topics include, material characteristics, tools and procedures for laying out the fabricating fiberglass duct run fittings and self-paced learning of layout and fabrication problems requiring the triangulation method is included. This course provides an overview of the basic welding processes and introduces the problems and techniques of field measuring for layout and installation of duct sections and offsets.

AED 80.13 SHEET METAL IV 0 UNIT
Class hours: 3 lecture/1 lab
Prerequisite: AED 80.12
This course covers recommended practices necessary to increase shop production and eliminate wasted time and materials. It provides installation methods for grilles, diffusers, and registers. Parallel and radial line development and triangulation methods of fabrication are reviewed. The purpose of louvers, dampers, and access doors and their construction are explained. This course covers specifications and principles for the layout and fabrication of hood and ventilation fittings, and covers industrial ventilation and conveying of particulates.

AED 80.14 HVAC I 0 UNIT
Class hours: 3 lecture/1 lab
Recommendation: Acceptance to HVAC Apprenticeship Program
This course introduces the Heating, Ventilating, and Air Conditioning (HVAC) trainee to the basic concepts and environmental concerns related to heating, ventilating, and air conditioning. It also describes the apprentice program and the career opportunities available in the HVAC trade.

AED 80.16 HVAC III 0 UNIT
Class hours: 3 lecture/1 lab
Prerequisite: AED 80.16
This course instructs trainees in preventive maintenance of HVAC system. Students will become familiar with the different types of troubleshooting and servicing of heating systems.

AED 80.17 HVAC IV 0 UNIT
Class hours: 3 lecture/1 lab
Prerequisite: AED 80.16
This course discusses techniques for reading and using blueprints, specification and shop drawings. It introduces indoor air quality and its effect on the health and comfort of building occupants. Identifies equipment and methods used. Students learn about various heat recovery and reclaim devices using their computers and microprocessor controls. Water problems encountered in heating and cooling systems are identified, and various water treatment methods and equipment is discussed. Factors that affect the heating and cooling loads of a building are included in this process. Types of duct systems as well as their selection, sizing and installation are discussed. Ice-making machines are also covered.

AED 80.18 ELECTRONIC SYSTEMS TECHNICIAN I 0 UNIT
Class hours: 3 lecture/1 lab
Recommendation: Acceptance into EST Apprenticeship Program
This course introduces the Electronic Systems...
Announcement of Courses

Technician trainee to construction materials and methods, pathways, spaces and electrical theory. It also covers hand bending of conduit, electrical safety and low-voltage cabling.

AED 80.19 ELECTRONIC SYSTEMS TECHNICIAN II 0 UNIT
Class hours: 3 lecture/1 lab
Prerequisite: AED 80.18
This course provides the Electronic Systems Technician trainee with an overview of related mathematics, electrical theory, electrical testing equipment, power quality and grounding, electrical blueprints, voice and data systems, switching devices and timers, and terminating conductors. Introduction to codes and standards and computer applications will be covered.

AED 80.20 ELECTRONIC SYSTEM TECH III 0 UNIT
Class hours: 3 lecture/1 lab
Prerequisite: AED 80.20
This course provides the Electronic Systems Technician trainee with an overview of cable selection, busses and networking, fiber optics, video systems, wireless communication, site survey, job planning, low-voltage maintenance and repair, supervision, fire alarm and security systems.

AED 80.21 INTRODUCTION TO ELECTRICAL CRAFT TRAINING 0 UNIT
Class hours: 45.0 lecture/45.0 lab
This course is the introductory or beginning course for “first period” apprentices in a series of specialty courses for electrical craft training involved in the construction industry. Emphasis will be placed on safety and the overall aspects of this specialty industry. Students will have an orientation covering craft training and personal development.

AED 80.22 ELECTRICAL CRAFT TRAINING – LEVEL I 0 UNIT
Class hours: 45.0 lecture/28.0 lab
Students will be introduced to methods of hand bending conduit and various methods used to install conduit as well as how to cut, ream, and thread conduit. Students will learn to use correct applications of non-threaded, threaded fasteners and anchors. Electrical theory, including a navigational road map for using the National Electrical Code (NEC) will be stressed. This course will introduce the types and applications of raceways, wire ways, and use of ducts. Students will learn function, operation and characteristics of transducers, transistors, amplifiers, integrated circuits and photo-operated devices, digital and logic circuits. Students will learn to read electrical blueprints, including layout, types of lines, symbols, drawings, architects and engineer’s scales and electrical specifications. Commercial, industrial, and residential wiring will be covered.

AED 80.23 ELECTRICAL CRAFT TRAINING – LEVEL II 0 UNIT
Class hours: 87.0 lecture/58.0 lab
Students will focus their studies in the methods, techniques, and characteristics related to electrical systems, their parts, circuits, and connections. They will learn the purpose of grounding and bonding electrical systems using National Electric Code (NEC) regulations. This course covers all types of bends in all sizes of conduit, focusing on mechanical, hydraulic, and electrical benders. It also covers the transportation, storage, and set up of cable reels, methods of rigging, and procedures for complete cable pulls in raceways and cable trays, focusing on National Electrical Manufacturers’ Association (NEMA) and NEC installation requirements. Students will be taught about conductor terminations, splices, and the installation of electric services, circuit breakers and fuses, contactors and relays, and the basic principles of electrical lighting.

AED 80.24 ELECTRICAL CRAFT TRAINING – LEVEL III 0 UNIT
Class hours: 87.0 lecture/58.0 lab
Students will be introduced to industry standards for electrical work, including branch circuits, rating and de-rating, and various types of residential and commercial electrical loads. This course covers the types of conductors used in wiring systems, including insulation, current-carrying capacity temperature ratings, and the use of fuses for over-current protection in all types of electrical systems. Functions, operation, and characteristic of various types of motors will be taught to the electrical student. Students will learn about hazardous locations and how to correct them.

AED 80.25 ELECTRICAL CRAFT TRAINING – LEVEL IV 0 UNIT
Class hours: 87.0 lecture/58.0 lab
This course will cover basic calculation procedures and calculations for residential, commercial, and farming application. Students will be introduced to the practical applications of lighting, covering lighting installations, applications and wiring systems, and basic electronic theory. This course will also introduce the student to fire alarm systems, specialty transformer, principles and practical applications of solid state controls, and Heating, Ventilating and Air Conditioning (HVAC) controls. A brief introduction to welding machine types and how operate will be covered. Students will continue learning detailed installation techniques for heating and cooling elements. Students will continue their training in motor maintenance techniques. An overview of high voltage terminators and splices and the National Electric Code (NEC) and cable manufactures requirement will be covered.

AED 80.18 ELECTRONIC SYSTEM TECHNICIAN II 0 UNIT
Class hours: 3 lecture/1 lab
Prerequisite: AED 80.20
This course provides the Electronic Systems Technician trainee with an overview of cable selection, busses and networking, fiber optics, video systems, wireless communication, site survey, job planning, low-voltage maintenance and repair, supervision, fire alarm and security systems.

AED 90.01 SUPERVISED SCIENCE TUTORIAL 0 UNIT
Class hours: 36 lab
This course is designed to facilitate the learning of scientific principles and techniques through individualized and mediated instruction. It is open to any student enrolled in any science course. (Formerly BIOL 9T, CHEM 9T)

AED 90.03 SUPERVISED COMPUTER UTILIZATION TUTORIAL LAB 0 UNIT
Class hours: 18 lab
Students must attend two hours minimum per week and are limited to a maximum of six hours per week multiplied by the number of AS/400 courses in which the students are enrolled. (Formerly CIS2L/CIS 3L)

AED 90.02 COMMUNICATION DISORDERS 0 UNIT
Class hours: 3 lecture
Open entry/open exit
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 90.26 ELECTRONIC SYSTEM TECHNICIAN II 0 UNIT
Class hours: 3 lecture
Open entry/open exit
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)

**AED 90.46**  
**INDIVIDUALIZED SPEECH**  
0 UNIT  
Class hours: 3 lab  
Open entry/open exit  
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)

**AED 90.47**  
**SUPERVISED NURSING – TUTORIAL**  
0 UNIT  
Class hours: 9 lab  
Open entry/open exit  
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)

**AED 90.7**  
**SUPERVISED ASSISTANCE FOR TECHNOLOGY BASED COURSES**  
0 UNIT  
Class hours: 3 lab  
Open entry/open exit  
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)

**AED 90.91**  
**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)
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.

**ABBREUZZESE, 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

**ABORN, LUCINDA (2006)**  
Dean of Disabled Student Program & Services  
B.A. Southwest Texas State University  
M.A. California State University, Northridge  
Ph.D University of Northern Colorado

**ACKLAND, DEAN (1987)**  
Professor  
Coordinator/Supervisor of Student Activities  
B.S., California State University, Long Beach  
M.A., Azusa Pacific

**ALBANESE, JAMES (2008)**  
Interim Vice President of Business Services/Assistant Superintendent  
B.A., California State University, San Diego  
M.B.A., Ed.D, University of Southern California

**ALENIKOV, TERESA (2002)**  
Assistant Professor  
Accounting/Finance  
B.S., M.B.A., California State University, Long Beach

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

**ANDRADE, ISREAL (2006)**  
Instructor  
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**ARAGON, RICHARD (1994)**  
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M.A., California State University, Los Angeles

**ARCE, CARLOS (1991)**  
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B.A., California State University, Chico  
M.A., California State University, Sacramento

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B.S., Nursing University of the State of New York  
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M.B.A., University of La Verne  

MOTRUK, NINA (2001)  
Associate Professor  
Cosmetology  
A.A., Cerritos College  
B.S., Southern Illinois University  

MUELLER, BARBARA J. (1995)  
Professor  
English  
B.A., Kansas State University  
M.A., California State University, Long Beach  

MULLIN, MARY (2005)  
Associate Professor  
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 State Polytechnic University, Pomona  
M.A., California State University, Dominguez Hills  
M.S., National University  

NAJARIAN, HAGOP (1999)  
Associate Professor  
Art and Design  
B.F.A., California State University, Long Beach  
M.F.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  

NATIVEVID, RACHEL (2002)  
Assistant Professor  
Nursing Education  
A.S., M.S., 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, PHUONG D. (1991)  
Professor  
Computer and Information Sciences  
B.S., M.S., University of California, Davis  

NIKDEL, MOJDEH (1997)  
Professor  
Mathematics  
B.S., M.A., 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.V.E., California State University, Long Beach  

O’DONNELL, PATRICK (2004)  
Manager Information Technology  
B.S., California State University, Long Beach  

OBASOHAN, VICTOR (1992)  
Instructor  
Political Science  
B.S., M.A., Jackson State University  

O’ROURKE, DANIEL M (1974)  
Acting Director of Human Resources  
A.A., Cerritos College  

OBAZUAYE, SUNDAY (2005)  
Instructor  
Political Science  
B.A., Alaska Pacific University  
M.P.A., University of Alaska Anchorage  
M.A., PhD., Claremont Graduate University  

OLIVER, SUSAN (1995)  
Professor  
History  
B.A., George Washington University  
M.A., Ph.D., University of California, Los Angeles  

O’NEIL, SCOTT (2000)  
Instructor  
Mathematics  
B.S., University of California, Santa Barbara  
M.S., California State University, Long Beach  

OROZCO, REBECCA JENNIFER (2007)  
Instructor  
Nursing  
B.S., Pacific Union College  
M.S., California State University, Long Beach  

PACHECO, RUPERT (2004)  
Instructor  
Welding  
A.S., Long Beach City College  
B.S., Southern Illinois University  

PAGE, ELIZABETH (1998)  
Associate Professor/Counselor (DSPS)  
B.A., California State University, Dominguez Hills  
M.A., California Polytechnic State University, San Luis Obispo  

PAIGE, MATTHEW (1999)  
Associate Professor  
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
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

PIERINI, MICHAEL S. (1995)
Associate Professor
Culinary Arts/Baking
A.A., West Los Angeles College
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PIORKOWSKI, MARIJEAN (1977)
Professor
Physical Therapist Assistant Program
A.A., Orange Coast College
B.S., M.S., University of California, Los Angeles

PIRTELE, DIANNE D. (1997)
Assistant Professor
Sociology
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PORTIGAL, STEVEN J. (1991)
Professor
Art and Design
B.A., San Fernando Valley State
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POTTER, INGEBORG (1979)
Professor
German
B.A., M.A., California State University, Fullerton

Pribble, Mary (1984)
Professor
Paralegal
A.A., Citrus College
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J.D., Western State University

PRICE, TERRY L. (1975)
Professor
Plastics Technology
A.A., East Los Angeles College
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PRINDELE, JEANINE V. (1977)
Professor
Health, Physical Education/Athletics
B.A., M.A., California State University, Long Beach
M.Ed., Azusa Pacific University

PRITCHARD, JR., GARY (1999)
Associate Professor
Music
B.M., Chapman University
M.A., Claremont Graduate School
Ph.D., University of California - Irvine

QUAAS-BERRYMAN, FRANCIE (1999)
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English
A.A., Santa Ana College
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RATCH, SMITA (2006)
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Biological Sciences
B.S. University of California, Irvine
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REAL, YANNICK (2000)
Associate 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)
Professor
Political Science
B.A., M.A., Ph.D., University of Southern California

RENTERIA, ROBERT A. (1975)
Professor
Reading
A.A., East Los Angeles College
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RICHARDSON, STEVEN (2000)
Executive Director of Foundation
B.A., Biola University

RICHIEY, THOMAS (2003)
Facilities Manager
A.A., Cypress College

RIEDEL, PATRICIA (2003)
Assistant Professor
Nursing
B.S., California State University, Los Angeles
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RIFLE, ROBERT (2003)
Director of Physical Plant
A.A., Fullerton College
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RIGBY, JEFFREY (1991)
Professor
Anthropology
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RIZKALLAH, BERLANTI (1981)
Director of Fiscal Services
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ROBERTSON, CHARLES C. (1994)
Professor
Automotive Collision Repair
A.A., Cerritos College
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ROBLES, MARTHA (2004)
Instructor
Adult Ed/Diversity Programs
B.A., California State University, Chico

RODRIGUEZ, NORMA C. (1983)
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ROMER, CHRISTINE (1981)
Associate Professor
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ROMERO, VIRGINIA (1980)
Professor/Athletics Counselor
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ROSE, LINDA D. (1994)
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English
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ROSENFIELD, KIMBERLY (1999)
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Speech Communication
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ROTHER, EDWARD (1989)
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Architecture
B.S., M.Arch., University of Illinois
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ROYOZAKI, EVELYN (1990)
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SESTINI, SALLY (1986)
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Mathematics
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SHARP, MAGEYA (1983)
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B.A., California State University, Long Beach
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SHIMAZU, CHERYL (1989)
Professor
Chemistry
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SMITH, DANIEL (2002)
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SMITH, FELICIA (2004)
Assistant Professor
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R.S., University of Southern California

SMITH, PATRICIA ROBBINS (2002)
Director of Community Education
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SOTO, ARMANDO (1998)
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STAMMERJOHN, CARL (2004)
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A.A., American River College
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STEIN, GERALD (1992)
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STILES, LYNN M. (1990)
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English
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STOLZE, TED (2004)
Instructor
Philosophy
B.S., Davidson College
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STUART, PEGGY J. (1995)
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B.S.N. California State University, Long Beach
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SUGIHARA-CHEETHAM, JOANN (2002)
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SUGIYAMA, CHRISTINE (1987)
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SWANSON, JOHN (1992)
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TAYLOR, KEVIN (1992)
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TORRES-BOWER, ANA (1992)
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Philosophy
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TRAGER, JULIE (2001)
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Art History
B.A., Rhode Island School of Design
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TROUP, JACQUELYN A. (1991)
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UKITA, TRACI (2001)
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VALENZUELA, RAUL (1990)
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WALLACE, MARK L. (2006)
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WALTERH, ROBERT S. (1992)
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Microbiology
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WARD, DEBRA SUE (2007)
Director of Child Development Center
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WATANABE-LONSBURY, SUSAN (1991)
Professor
Theatre Arts
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WEDELL, DONNA (2004)
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A.S., Rio Hondo College
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WELL, GEORGIA (1983)
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Theatre Arts
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WELLIVER, KAREN M. (1988)
Professor
Health, Physical Education/Athletics
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WELLS, DOUGLAS (1989)
Professor
Physical Education/Athletics
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WHITE, BREND A J. (1993)
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Cosmetology
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WHITSON, BEVERLY (1984)
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WILSON, CHRISTOPHER (2000)
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WILSON, J ACK (1999)
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WISSA, FARID F. (1988)
Professor
Engineering Design Technology
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WORREL, DARA (2004)
Assistant Professor
Mathematics
B.S., M.S., California State University, Long Beach

XUE, ZHIHONG (RENA) (2007)
Instructor
Chemistry
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YABROFF, ALLISON (2006)
Assistant Professor
Biological Sciences
B.S., M.A., Ph.D., University of California, Los Angeles

YEAGER, MARTHA (1982)
Associate Professor
English as a Second Language
B.A., State University of New York, Buffalo
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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

ZEWAIL, MER VAT (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.  
(1965-1983) 
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

BAYER, CONNIE  
(1966-2002) 
Health and Physical Education

BEAM, ROGER D.  
(1975-1993) 
Automotive Technology

BEHRENS, SHARON  
(1976-1996) 
Nursing Education

BELLOY, 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

BOGDANOVICH, JACK  
(1971-1998) 
Physical Education/Athletics

BONNYCASTLE, WILLIAM L.  
(1960-1984) 
English

BOODNICK, ALLAN  
(1965-1991) 
Counselor

BOS, ROBERT KEMP  
(1958-1984) 
Counselor

BOYLE, JOHN  
(1974-2006) 
Biology

BRADY, LAWRENCE  
(1970-1999) 
Instructional Dean, Fine Arts and Communications

BRADY, MELVIN  
(1963-1991) 
Business

BROADBENT, LINDSEY  
(1966-79) 
Technical Mathematics

BRODERICK, WILLIAM E.  
Reading

BUFALINI, ELVIDIO G.  
(1967-1986) 
Counselor

BURNIGHT, RALPH F.  
(1956-62) 
President/Superintendent

CABEEN, CHARLES  
(1958-1979) 
Psychology

CALEY, DONALD  
(1965-1987) 
Marketing, Management, Business

CAMPBELL, CLINTON P.  
(1965-1983) 
Sociology
<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
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<tr>
<td>Cannon, John P.</td>
<td>1958-1980</td>
<td>Earth Science</td>
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<tr>
<td>Carlson, Barbara</td>
<td>1972-1985</td>
<td>Nursing</td>
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<td>Carlson, Leland</td>
<td>1965-1967</td>
<td>Mathematics</td>
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<td>Carlson, Norman</td>
<td>1982-1991</td>
<td>Drafting</td>
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<td>Carson, Charlotte</td>
<td>1963-1985</td>
<td>Nursing</td>
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<td>Caskey, William</td>
<td>1961-1989</td>
<td>Accounting</td>
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<td>Cates, Carroll</td>
<td>1959-1988</td>
<td>Physical Education</td>
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<td>Chadwick, Ralph G.</td>
<td>1962-1980</td>
<td>Associate Dean, Technology</td>
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<td>Chowen, Judith</td>
<td>1981-2006</td>
<td>Accounting</td>
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<td>Cole, Joseph C.</td>
<td>1960-1973</td>
<td>Psychology</td>
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<td>Conover, Sandy</td>
<td>1991-2002</td>
<td>Nursing Education</td>
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<td>Cook, Edward P.</td>
<td>1965-1981</td>
<td>Welding</td>
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<td>Coppenger, Michael</td>
<td>1980-2004</td>
<td>Photography</td>
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<td>Cracchilo, Edith E.</td>
<td>1964-2000</td>
<td>Psychology</td>
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<td>Crane, Jule</td>
<td>1962-1989</td>
<td>Biology</td>
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<td>Cross, Kathleen</td>
<td>1990-2008</td>
<td>Counselor</td>
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<td>Couse, Lois</td>
<td>1963-1980</td>
<td>Nursing Education</td>
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<td>Dozier, Amy L.</td>
<td>1958-1974</td>
<td>Physical Education and Recreation</td>
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<td>Dozier, Patricia</td>
<td>1989-2001</td>
<td>English as a Second Language</td>
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<td>Dozier, Rose Marie</td>
<td>1964-1989</td>
<td>French</td>
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<tr>
<td>Drant, Sandra</td>
<td>1992-2003</td>
<td>Court Reporting</td>
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<td>Dugan, V. Edwin</td>
<td>1970-1984</td>
<td>Electronics</td>
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<td>Duran, Agnes H</td>
<td>1987-2004</td>
<td>Reading</td>
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<td>Egan, Isabelle</td>
<td>1989-2007</td>
<td>Counselor</td>
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<td>Elias, Abundio</td>
<td>1969-1992</td>
<td>Spanish</td>
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<td>Enquist, Marvin</td>
<td>1990-2005</td>
<td>Administration of Justice</td>
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<td>Erjavec, Donald</td>
<td>1965-1998</td>
<td>Music</td>
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<td>Escobar De Patryla, Lillian</td>
<td>1974-1993</td>
<td>Child Development</td>
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<td>Evans, William</td>
<td>1974-2002</td>
<td>Accounting</td>
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<td>Failor, Joleen</td>
<td>1976-2008</td>
<td>Dental Assisting</td>
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<td>Fallar, Margaret</td>
<td>1965-1979</td>
<td>Nursing Education</td>
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<td>Feeney, John</td>
<td>1958-1991</td>
<td>Music</td>
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</table>
FENNER, WILBURT  
(1972-1990)  
Art

FINLEY, ROBIN  
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Biology

FISCHER, LAWRENCE  
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FOERSTER, ROBERT  
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FRAME, JAMES  
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Business Mathematics

FRANK, REX C.  
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(1968-1993)  
Business Computer Info Systems

GIANNONE, ANTHONY  
(1971-1991)  
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GIRTNER, JOSEPH P.  
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(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

HENGSTTELER, ELIZABETH  
(1956-1977)  
Philosophy

HERR, FLORENCE S.  
(1973-1986)  
Business

HICKEY, X. RAYMOND  
(1959-1979)  
Electronics

HINRICHSEN, KEITH  
(1965-2002)  
History

HOAD, GRETCHEN A.  
(1987-2002)  
Business Paralegal

HOFELUND, CLYDE  
(1957-1982)  
Drafting

HOLLAND, ROGER  
(1976-1992)  
Business Administration

HOLMAN, JEAN LEE  
(1962-1974)  
Cosmetology

HOLMES, CAROLYN R.  
(1996-2007)  
Nursing

HOLSTEGE, MARTIN  
(1962-1989)  
Mathematics

HOUSEMAN, PHIL  
Dean of Student Activities

HUBBELL, SILVIA R.  
(1966-1999)  
Spanish

HUBRECHT, 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  

JORDAN, ROBERT  
(1960-1989)  
Sociology  

KROGUE, R. KENT  
(1972-2005)  
Biology  

IDEAL, BONNIE  
(1965 – 2002)  
Office Occupations  

JULIANO, RICHARD  
(1965-1991)  
Instruction Dean, HPE/Athletics  

LACKMAN, JACK  
(1965-1984)  
English  

IKEMOTO, MILDRED  
(1967-1992)  
Instructional Dean/Health Occupations  

KAMANSKI, PAUL DAVID  
(1959-1989)  
Physical Education  

LA GUARDIA, PATRICIA  
(1973-1998)  
Director, Assessment Center  

INCORVIA, JOSEPH  
(1958-1978)  
Business  

KARVELIS, DONALD  
History  

LAHRS, WILLIAM E.  
(1965-1983)  
Office Occupations  

JACKSON, JOHN  
(1957-1991)  
Automotive Technology  

KELDER, JOHN  
(1965-1991)  
Business Computer Information Systems  

LAIDLAW, RUTH F.  
(1964-1986)  
Home Economics  

JACKSON, THOMAS  
(1980-2002)  
Accounting  

KELLY, NANCY J.  
(1975-2002)  
Health, Physical Education  

LANE, WILMA C.  
(1973-1989)  
Cosmetology  

JAEGGER, GEORGE A.  
(1965-2003)  
English  

KENNY, JAMES  
Computer and Information Systems  

LANG, JEAN H.  
(1972-1989)  
Nursing  

JANKOWSKI, SHIRLEY  
(1975-1990)  
College Nurse  

KERR, JOSEPH P.  
(1963-1966)  
Data Processing  

LANGDON, DEARESTEEN  
(1968-1991)  
Special Education  

JENKINS, SARAH  
(1959-1989)  
Librarian  

KETELLE, WILLIAM  
(1975-1992)  
Furniture Manufacturing Technology  

LAYTON, DONALD W.  
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Earth Science  

JENNINGS, STANLEY  
(1957-1985)  
History  

KIEFFER, KEPRNER K.  
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Accounting  

LEVI, LINDA  
Art  

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(1964-1982)  
Economics  

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Physical Education  

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Speech Communications  

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KLEIN, WERNER  
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Dental Assisting  

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Geology  

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Physical Education  

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(1957-1987)  
Counselor  

LITTLETON, OSCAR  
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English  

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(1958-1982)  
Theatre Arts  

LOPEZ DEGAINES, CHRISTINA  
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Counselor  

JONES, MARGIA  
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Business Education  

KORSMEIER, HENRY F.  
(1956-1969)  
Assistant Superintendent, Business  

LUCAS, STANLEY  
(1976-1991)  
Automotive Technology
LUNDGREN, AUSTIN  
(1965-1989)  
Accounting

MADDEN, JOHN  
(1998-2006)  
Philosophy

MAGNUSON, WALTER C.  
(1973-1993)  
Vice President of Business Services

MAKI, ROY E.  
(1963-1983)  
Business

MANIRE, MARGARET V.  
(1959-1975)  
School Nurse

MANTZ, CONCETTA  
(1973-1993)  
Sociology

MARKHAM, WENDELL C.  
(1965-1980)  
Chemistry

MARTIN, LUGENE  
(1957-1989)  
Director of Counseling

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Spanish

MARTINEZ, RUBEN  
(1966-1991)  
Spanish

MASTALER, RUDY  
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Technical Mathematics

MAYS, GLADYS  
(1964-1979)  
Mathematics

MCDANIEL, KATHLEEN H.  
(1962-1982)  
Business Education

MCGINNIS, JOHN  
(1988-2008)  
Dean of the Library & Learning Resource Center

MCGRATH, RICHARD F.  
(1963-1999)  
Administration of Justice

MCMAHON, GEORGE VINCENT  
(1961-1984)  
Technical Mathematics

MEDOFF, JACk L.  
(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, MELVIN  
(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.  
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Counselor

NORMAN, DAVID  
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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

PATRICK, CAROL  
(1997-2006)  
Dean of Counseling Services

PELLONI, JR., JOHN  
(1989-2000)  
Cosmetology

PENDLETON, WILLIAM C.  
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Physical Education

PERALTA, TRUDY B.  
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English

PERKINS, SHERRY  
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Court Reporting
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<td>1963-2003</td>
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<td>Siriani, Don V.</td>
<td>1957-1983</td>
<td>Dean of Instructional Support</td>
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<td>Smith, Jeffery</td>
<td>1979-2008</td>
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<td>1961-1983</td>
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<td>Machine Tool Technology</td>
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<td>Sokolik, Joseph</td>
<td>1982-1991</td>
<td>Technology</td>
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SPENCER, SONORA W. (1960-1973) Dental Assisting

SPETRINO, ALBERT (1973-2005) Disabled Student Programs and Services


STEWART, PATRICIA J. (1972-2006) Dental Hygiene

STOKKAN, RUSSELL (1965-2001) History


SUMNER, EDWARD M. (1957-1970) Electronics


TABOR, RON (1965-1981) Speech Communication

TASLITZ, HOWARD (1964-1992) History


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


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


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 (1970-1989) Reading

WENSMAN, MARTIN H. (1963-1983) Associate Dean, Business Division

WERNER, 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


WHITLOCK, THOMAS (1964-1999) Accounting/Business Law

WHITMAN, CORINE (1967-1981) Nursing Education

WILKOFF, HUGH
(1962-2003)
Business

WILLETTE, CHARLES
(1964-1985)
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

WOOLEVER, JAMES D.
Computer and Information Sciences

WRIGHT, FRANK
(1965-2005)
Mathematics/Computer Sciences

YEE, FRANKLIN
Ornamental Horticulture

YSAIS, REY
(1965-2003)
Mathematics

ZIVE, INA
(1972-2002)
Dental Hygiene
# Classified Employees by Area

## Academic Affairs

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<td>B.S., University of Phoenix</td>
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## Admissions and Records

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## Business Education

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## Business Services

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## Campus Police

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## Career Services

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## Community, Industry & Technology Education

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<td>Weekend College</td>
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<tr>
<td>Welding Courses</td>
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<tr>
<td>Welding Major</td>
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<tr>
<td>Wildlife (Game) Management Major</td>
<td></td>
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<tr>
<td>Women's Studies Courses</td>
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<tr>
<td>Women's Studies Major</td>
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<tr>
<td>Woodworking Courses</td>
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<tr>
<td>Woodworking Mfg. Technologies Major</td>
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<tr>
<td>Word Processing Courses</td>
<td></td>
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<tr>
<td>(See Business Computerized</td>
<td></td>
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<tr>
<td>Office Technologies)</td>
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<tr>
<td>Word Processing Major</td>
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<td>Z</td>
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<tr>
<td>Zoology Courses</td>
<td></td>
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<tr>
<td>Zoology Major</td>
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</tr>
</tbody>
</table>
Cerritos College Alcohol and Drug Policy

**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 Re-entry, 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><strong>ALCOHOL</strong></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><strong>COCAINE/CRAK</strong></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><strong>MARIJUANA</strong></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><strong>STERIODS</strong></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><strong>TOBACCO</strong></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>