OPEN COURSES

All courses, course sections, and classes of the College shall be open for enrollment to any person who has been admitted to the College. Enrollment shall be limited to students meeting properly validated prerequisites and co-requisites. Additional enrollment limitations may be established by the President/Superintendent for state and federal statues, or regulations, or other practical considerations. The President/Superintendent shall establish procedures to establish exemptions and exceptions for the above limitations, including processes for student challenge. Each of these procedures and processes shall comply with Title 5 Regulations.

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**2009-2010 ACADEMIC CALENDAR***

**FALL SEMESTER 2009**
Instruction Begins ................................ August 17, 2009
Final Examinations .................................. December 12-18, 2009
Fall Semester Ends .................................. December 18, 2009

**SPRING SEMESTER 2010**
Instruction Begins .................................. January 11, 2010
Final Examinations .................................. May 15-21, 2010
Commencement ...................................... May 15, 2010
Spring Semester Ends ............................... May 21, 2010

**HOLIDAYS (The College will be closed)**
Independence Day .................................. July 3, 2009
Labor Day ............................................. September 7, 2009
Veterans Day Observance ......................... November 11, 2009
Thanksgiving Holiday ............................. November 26-29, 2009
Winter Holiday ..................................... December 24, 2009 – January 1, 2010
Dr. Martin Luther King, Jr. Birthday Observance .... January 18, 2010
Abraham Lincoln Birthday Observance ........... February 12, 2010
George Washington Birthday Observance ........ February 15, 2010
Good Friday ......................................... April 2, 2010
Memorial Day ........................................ May 31, 2010

**RECESS**
Semester Break ..................................... December 21, 2009-January 8, 2010
Spring Recess ....................................... March 29-April 4, 2010

*This calendar is subject to change. The college offers many short-term classes starting at various times throughout the year. The Schedule of Classes contains specific dates, times, procedures, and appointment information.*

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**ANNUAL SECURITY REPORT**

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

<table>
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### Divisions

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### Areas of Interest

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<td>Writing Center</td>
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BOARD OF TRUSTEES
President .................................................. Mr. Bob Epple
Vice President ........................................... Dr. Bob Hughlett
Secretary .................................................. Ms. Carmen Avalos
Member ..................................................... Mr. Bob Arthur
Member ..................................................... Dr. Tina Cho
Member ..................................................... Dr. Ted Edmiston
Member ..................................................... Mr. Tom Jackson
Student Member ........................................ Mr. Felipe Grimaldo

ADMINISTRATION
Acting President/Superintendent ............. Mr. William C. Farmer, Jr.
Interim Vice President of Academic Affairs/
Assistant Superintendent ....................... Dr. Marilyn Brock
Interim Vice President of Business Services/
Assistant Superintendent ...................... Dr. James Albanese
Vice President of Student Services/
Assistant Superintendent ....................... Dr. Stephen B. Johnson

ACADEMIC AFFAIRS
Executive Dean of Community, Industry and
Technology Education ......................... Mr. Nick Kremmer
Dean of Academic Affairs ....................... Mr. M.L. Bettino
Dean of the Library and Learning
Resource Center ................................. Mr. Carl Bengston
Instructional Dean of Business Education .......... Ms. Rachel Mason
Instructional Dean/Fine Arts/Communications .... Dr. Connie Mayfield
Instructional Dean/Health Occupations ................ Ms. Jenine Nolan
Instructional Dean/HPE/Athletics ...................... Dr. Daniel Smith
Interim Instructional Dean/Humanities and
Social Sciences ................................. Dr. Bryan Reece
Instructional Dean/ Liberal Arts ..................... Dr. Linda Rose
Instructional Dean/Science, Engineering and
Mathematics ................................ Dr. Carolyn Chambers
Instructional Dean/ Technology ....................... Mr. Steven Berkline
Director of Adult Education/Diversity Programs .. Ms. Graciela Vasquez
Director of Advanced Transportation
Technologies Project .............................. Ms. Jannet Malig
Director of Child Development Center .......... Ms. Debra Ward
Director of Community Education ............... Ms. Patricia Robbins Smith
Director of Economic Development ............... Mr. Tom Molyneux
Director of Foster/Kinship Education Programs ... Ms. Lori Switanowski
Director of Pathway Programs ..................... Ms. Maggie Cordero
Interim Director of Research and Planning ... Dr. Christopher Myers

BUSINESS SERVICES
Director of Fiscal Services ....................... Mrs. Lola Rizkallah
Director of Information Technology ........ Ms. Lee Krichmar
Director of Physical Plant ......................... Mr. Robert Rifflle
Director of Purchasing .......................... Ms. Jenny Ho
Accounting Manager .............................. Mr. Shawn Jones
Budget Manager .................................. Ms. Ramona Payne
Facilities Manager ............................... Mr. Thomas Richey
Manager Information Technology ............ Mr. Patrick O’Donnell
Operations Manager .............................. Mr. Arcadio Avila
Payroll Manager ................................ Ms. Deanna Hart

STUDENT SERVICES
Dean of Admissions, Records and Services ... Ms. Stephanie Murgua
Dean of Counseling Services ..................... Ms. Renée De Long Chomiak
Dean of Disabled Student Programs and Services ... Dr. Lucinda Aborn
Dean of Student Support Services ................ Ms. Kim Westby
Chief of Campus Police ........................... Mr. Richard Bukowiecki
Director of Career and Assessment Services .... Ms. Theresa Lopez
Director of Student Activities ..................... Ms. Holly Bogdanovich
Assistant Director of EOPS .......................... Ms. Norma Rodriguez
Coordinator of CalWORKs Services ............. Ms. Adriana Flores-Church
Coordinator of International Student Services .... Ms. Danita Kurtz
Coordinator of Student Health Services .......... Ms. Nancy Montgomery

HUMAN RESOURCES
Interim Director of Human Resources .......... Mr. Vic Collins
Assistant Director of Human Resources ........ Ms. Adriana Flores-Church
Manager of Employment Services/
Faculty & Staff Diversity Officer ............... Ms. Cynthia Convey

FOUNDATION
Executive Director of Foundation .................. Mr. Steven Richardson

PUBLIC AFFAIRS
Director of Public and Governmental Relations ... Mr. Mark Wallace
Web Administrator .............................. Mr. Taylor Bowman

FACULTY SENATE
Acting Faculty Senate President ...................... Ms. Debra Moore

CERRITOS COLLEGE FACULTY FEDERATION – AFT
CCFF-AFT President ......................... Dr. Ted Stolze

CALIFORNIA SCHOOL EMPLOYEES ASSOCIATION
CSEA President .............................. Ms. Lynn Laughon
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 revamped 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. Cerritos College ranks third in California and sixth in the nation among Hispanic-serving community colleges for the number of associate's degrees granted to Hispanic students. 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.

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.

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.

A local bond act was passed by District voters in 2004 providing the college with $210 million for the transformation of the campus. Voter confidence in the college was high as the college demonstrated the need for new buildings and facilities for the next fifty years of service to the region. Construction of the new science building was completed. Currently, new projects under way include the new aquatics center, a new classroom building, and remodelled and new automotive technology buildings. Planning continues for additional buildings on campus including the replacement of the Burnight Center.

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.

Northwood University, with campuses in Florida, Michigan, and Texas, joined Cerritos College in 2006 to offer a Bachelor of Business Administration degree in either Management or Automotive Marketing/Management. Students are able to complete their first three years of college courses at Cerritos College and then take their fourth year of coursework with Northwood University on the Cerritos College campus. This unique partnership provides a direct path for students to earn their higher degrees with a nationally recognized and accredited university. Northwood University, with over 33,000 graduates, is celebrating its 50th anniversary in 2009.
VISION
Driven by the pursuit of unparalleled student success, Cerritos College will provide access to innovative learning opportunities that promote the power of learning.

MISSION
Cerritos College's mission is to serve the community by building futures through learning. Cerritos College is an open access institution committed to providing high-quality, academically rigorous instruction in a comprehensive curriculum that respects the diversity represented in our student body and our region.

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 race, color, national origin, ancestry, sex/gender, age, religion, marital status, disability, Vietnam Veteran status, or sexual orientation. 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.
ACADEMIC INFORMATION
Admission to the College

Information is also available in Spanish. Find “Información en Español” in the Table of Contents.


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 www.cerritos.edu/admissions.

APPLICATION

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

Upon receipt of admission application, Admissions and Records will issue 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.

ADMISSION AND ENROLMENT 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 higher 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 who need accommodations due to a disability should make arrangements through their K-12 school district, in consultation with the Disabled Student Programs and Services (DSP&S) office at Cerritos College. Please call (562) 860-2451, Ext. 2335, for assistance.

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 higher, as reflected on the 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 who need accommodations due to a disability should make arrangements through their K-12 school district, in consultation with the Disabled Student Programs and Services (DSP&S) office at Cerritos College. Please call (562) 860-2451, Ext. 2335, for assistance.
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.

F-2 dependents are to be issued separate, individual I-20s. F-2 students transferring from high school who plan to attend Cerritos College as a full-time student must change to the F-1 status.

DOCUMENTATION REQUIRED:

- Application
- Fee of $50 for new students (fee of $35 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-20s
- Transfer Authorization (if applicable)
- Proof of Medical Insurance Coverage (available in the International Student Center)

Cost: One year of required fees and tuition for international students based on full time attendance of 12 semester units for the fall and spring terms*. Summer term is not considered a mandatory term unless it is the first semester of attendance or necessary for program completion. Some fees may be reduced during summer term.

Mandatory fees and charges:

- Application fee ................................................ $50
- Enrollment fee ................................................ $480 @ $20 per unit
- Non-resident tuition .............................. $4,560 @ $190 per unit
- Capital Outlay fee ........................................ $888 @ $37 per unit
- Student Health fee ...................................... $32 @ $16 per term
- Student Activity fee .................................. $20 @ $10 per term
- Health Insurance ............................................ $740 annually

Optional fees and approximate expenses:

- Parking permit fee .................. $60 @ $30 per term
- Book and supply expenses .................. $2,000 annually
- Living expenses .................... $12,000 annually

*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 $200 SEVIS fee must be completed before applying for or a re-validation of the F-1 Visa status. For information on paying the SEVIS fee, go to www.FMJfee.com.

For further information contact:

Cerritos College
International Student Center
11110 Alondra Blvd.
Norwalk, CA 90650-6298 U.S.A.
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 $190 per unit. The international student fee is $190 per unit plus $37 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 $16.00 per semester, $13.00 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 student parking for automobiles is $30.00 per semester and $15.00 for summer session. Mopeds and motorcycles may use designated areas at no charge. A daily permit may be purchased for $2.00 from the yellow dispensers located in the student parking lots.

Students are required to pay all fees at the time of enrollment. Students adding their names to wait lists will be charged the applicable enrollment fees and tuition. Failure to pay in seven (7) calendar days will result in withdrawal from courses and/or wait lists.

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 after classes have been officially dropped by the appropriate deadline for the session. A student is eligible for a refund if:

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. A copy of the military orders is required.

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 $25.00 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 will result in the withdrawal from courses and/or wait lists: withholding of grades, transcripts, diplomas, or enrollment privileges; or any combination thereof. The item or items being withheld shall be released when the student pays the financial obligation. (California Code of Regulations, Title 5, Section 59410)

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

Information is also available in Spanish. Find “Información en Español” in the Table of Contents. Información en español también está disponible. Busque donde diga “Información en Español” en el índice de contenido.

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/PLACEMENT" means the process of gathering information about an individual student to facilitate his or her success. At Cerritos College, assessment includes, but is not limited to, the collection of information regarding student's study skills, English language proficiency, computational skills, high school and/or college transcript review, evidence of 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, 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/assessment-center; 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 may repeat any assessment test 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 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 that has not been met. Prerequisites are checked at the time of enrollment (Auto-enroll and Instructor adds). Prerequisites are not checked when classes are added to shopping cart, but are enforced before completion of enrollment.

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 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/counseling.

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, a test score, or other requirement that demonstrates 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 PROCEDURE FOR STUDENTS?

A prerequisite may be challenged by students who have presented the appropriate reasons. It is the student’s responsibility to provide information to support the challenge. The prerequisite challenge must be filed and resolved prior to the student’s enrollment into the course. A Requisite Challenge Form can be obtained from the Admissions and Records Office, Counseling Center, or downloaded from www.cerritos.edu/counseling.

Students may challenge a prerequisite using the following procedure:

1. Complete the requisite challenge form.
2. Select one of the five choices listed on the form:
   A. The prerequisite is discriminatory or applied in a discriminatory manner.
   B. The student can demonstrate knowledge equivalent to the prerequisite.
   C. The student progress is unduly delayed because the prerequisite course is not reasonably available.
   D. The prerequisite has not been established following the district’s policy.
   E. The prerequisite has not been established in accord with Title 5.
3. Submit the completed form to the Academic Records and Standards Committee for approval or denial of request. Please allow at least ten business days for a response.
4. If the prerequisite challenge is approved, the student will need to enroll in the course in the Admissions and Records Office in person. MyCerritos and Falcon Phone will not recognize the approved form. Please note: A challenged requisite will not be deemed as a cleared requisite, therefore it will not appear on the transcript nor will it clear a like requisite in the future.
5. If the prerequisite challenge is denied, the student will need to complete the clearance process or course listed as the official requisite. There is no appeal process.
Enrollment Information

Information is also available in Spanish. Find “Información en Español” in the Table of Contents.

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 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 four-year institutions.

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

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

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. Student 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 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 the 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.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. Students are required to pay all fees at the time of enrollment. Students adding their names to wait lists will be charged the applicable enrollment fees and tuition. Failure to pay in seven (7) calendar days will result in withdrawal from courses and/or wait list. Please check your student account via MyCerritos www.cerritos.edu), Falcon Phone or in the Admissions and Records Office. All enrollments must be completed by the listed add deadlines.
3. Adding a class may be prevented due to holds or unauthorized course repetition. (See Repetition of Courses)
DROP PROCEDURES
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 strongly advised 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: 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.

Waiting List
Cerritos College utilizes a “paid” wait list. What this means is that once you have added your name to the wait list, you must pay all applicable fees for that class. Additionally, “auto-enroll” will be in operation. Auto-enroll will automatically enroll students in order from the wait list to the official roster when space becomes available. Each student is limited to a maximum of 10 wait-listed units. Auto-enroll from a wait list will not occur if:
1. Student has a hold (service indicator) on their account.
2. The class requisite has not been met.
3. Unauthorized course repetition would occur.
4. There is a class time conflict. Students may not be enrolled in two classes that meet at the same time.
5. If student is enrolled in a class AND on a wait list for the same course (i.e., enrolled in SOC 101 and #1 on the wait list for SOC 101 at another time) he/she will lose a seat when “auto-enroll” tries to move from the wait list to the official roster due to “Multiple Enrollment”.
Auto-enrollment will continue through the first week of the 18-week semester and the first day of class for shorter sessions. Attendance at the first class meeting is required in order to enroll or remain on the wait list. Failure to attend class does not create an automatic drop or refund. If you do not want your wait-listed classes, please drop them to avoid a substandard grade and forfeiture of fees.

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 approved units, throughout season of sport; not less than 24 approved units between seasons of sport.

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 legitimate ensuring a true and complete academic history. The computer system checks for course repetition at the time of enrollment.

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

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. (Title 5, Division 6, Ch. 6 Subchapter 9, §55763)

Cerritos College has identified the courses listed below as repeatable for the maximum number of times listed.

<table>
<thead>
<tr>
<th>COURSE</th>
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<th>UNITS</th>
<th>TIMES</th>
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</tr>
<tr>
<td>WMT 219L</td>
<td>Woodturning Lab</td>
<td>1.0</td>
<td>4</td>
</tr>
<tr>
<td>WMT 228L</td>
<td>Production Furniture Making and Manufacturing</td>
<td>1.0</td>
<td>4</td>
</tr>
<tr>
<td>WMT 229L</td>
<td>Comprehensive Woodworking Manufacturing Specialty</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>WMT 233</td>
<td>Morris Chair</td>
<td>4.0</td>
<td>3</td>
</tr>
<tr>
<td>WMT 235</td>
<td>Windsor Chair</td>
<td>3.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 237</td>
<td>Traditional American Furniture</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 239L</td>
<td>Traditional Furniture Lab</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 241</td>
<td>Special Topics in Handtool</td>
<td>2.0</td>
<td>4</td>
</tr>
<tr>
<td>WMT 243</td>
<td>Advanced Wood Veneering</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 244</td>
<td>Chest of Drawers</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 246</td>
<td>Rocking Chair</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 248</td>
<td>Production Furniture Making and Manufacturing</td>
<td>4.0</td>
<td>3</td>
</tr>
<tr>
<td>WMT 249L</td>
<td>Furniture Manufacturing Specialty</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>WMT 250</td>
<td>Intermediate Faceframe Cabinetmaking</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 251</td>
<td>Advanced Cabinetmaking</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 252</td>
<td>Intermediate 32MM System Cabinetmaking</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 253</td>
<td>Advanced 32MM System of Cabinetmaking</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 258</td>
<td>Mantels and Wall Systems</td>
<td>4.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 259L</td>
<td>Solid Surface Manufacturing Specialty Lab</td>
<td>2.0</td>
<td>4</td>
</tr>
<tr>
<td>WMT 268A</td>
<td>Production Cabinetmaking</td>
<td>5.0</td>
<td>3</td>
</tr>
<tr>
<td>WMT 268B</td>
<td>Production Cabinetmaking &amp; Manufacturing</td>
<td>5.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 268C</td>
<td>Production Cabinetmaking &amp; Manufacturing</td>
<td>5.0</td>
<td>2</td>
</tr>
<tr>
<td>WMT 269L</td>
<td>Cabinetmaking Manufacturing Specialty</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>WMT 281</td>
<td>Advanced Computer Operations for Cabinetmaking and Design</td>
<td>2.5</td>
<td>2</td>
</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 from class of students who are members of an active or reserve United States military service unit who receive orders compelling withdrawal from courses. Upon verification of such orders, a military withdrawal (MW) symbol may be assigned at any time after the period during which no notation is made for withdrawals. There will be no penalty for military withdrawals. Military withdrawal shall not be counted in progress probation and dismissal calculations.

### CLASSIFICATION OF STUDENTS

**Freshman**
One who has earned fewer than 30 units.

**Sophomore**
One who has earned 30 or more units but fewer than 60 units, or has completed 60 units but does not hold a degree.

**Graduate**
One who has been awarded the Associate in Arts degree or higher degree.

**Full-time**
One who is enrolled in 12 or more units.

**Part-time**
One who is enrolled in less than 12 units.

**College Bridge**
One currently enrolled in the 11th or 12th grade in high school who desires to enroll for college credit.

**Special Admit**
One currently enrolled in K-10th grade who desires to enroll for college credit.
PARKING REGULATIONS

Parking on campus is by permit only. Term and daily permits are available. Please refer to the Expenses section of the catalog for more information. Metered parking is also available.

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 THE REAR VIEW MIRROR OR PLACED ON THE DASHBOARD. THE PERMIT NUMBER MUST BE READABLE FROM THE OUTSIDE OF THE VEHICLE. NO OTHER LOCATION IS ACCEPTABLE. Vehicles not properly displaying a permit 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. Persons displaying a “DP” plate or placard may not park in spaces reserved for “carpool” or Board Members. Students may not park in stalls designated for staff parking unless they have a qualified disability and a valid “DP” plate or placard AND a current student parking permit displayed.

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 students with a valid “DP” plate or placard and a current parking permit.

Designated Parking Areas are Color Coded:

WHITE ................. Student parking, current term or daily student parking permit required.
YELLOW ............... Faculty and staff, permit required.
GREEN ................. Timed coin-operated meters
BLUE .................. Valid “DP” plate or placard and a current Cerritos College parking permit.
WHITE GRID MARKED Motorcycle parking only.
PINK ................... Cosmetology patron parking-located in Lot C-11. Pink cosmetology patron parking permit required.
DARK BLUE ............ Student Health Services

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

PARKING ON THE INTERIOR CAMPUS

Bicycles are to park in District-provided racks. Violaters will be cited. Only those vehicles with approval from the Campus Police Department 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, tow away and 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 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 into several CSU honors programs
• Guaranteed 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 3.0 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

Teacher TRAC

The Teacher TRAC program offers many services, programs, and pathways for students interested in teaching K-12. Teacher TRAC focuses on preparing future elementary school teachers, special education teachers, secondary teachers in the areas of math and science, and future Career Technical Education teachers at the secondary and community college level.

For students interested in becoming an elementary school teacher, Teacher TRAC’s flagship program is a partnership with California State University, Long Beach. As a student in the integrated, standards-based Teacher TRAC / CSULB program, you can earn your Bachelor’s degree and multiple-subject teaching credential, and complete your student teaching. Official Teacher TRAC students receive admission to CSULB (upon completion of the lower division general education and pre-major requirements).

Excellent opportunities are offered through the Teacher TRAC Program. These opportunities include work experience in schools, access to Teacher TRAC counselors, training on how to integrate technology into the classroom, participation in conferences for teachers, and access to Teacher TRAC Scholarships.

Change a life, shape a future, and give back to your community. Become a teacher!! California schools need new teachers each year. One of them can be you!

HOW DO I REGISTER?

Applications for the program are accepted each semester. Visit our website at www.teachertrac.com for an application and more information, or call (562) 860-2451, Ext. 2212.

Learning Communities Program

Learning communities involve the intentional creation of class pairs or clusters around a common theme, public issue or question. Typically, the same group of students is co-enrolled in two or more courses, usually from different disciplines—for instance, history and art, English and career guidance, political science and philosophy. Students enroll in both courses but receive a separate grade for each one.

Course instructors integrate their syllabi, encouraging students to gain a deeper understanding of each course, even as they discover connections between the two. Classroom activities, tests, assignments, field trips, research projects, and educational technology are used to engage students in their own learning, as well as provide them with valuable “real-world” skills.

Perhaps more importantly, the learning community model promotes student-centered learning, with an emphasis on an enriched classroom environment. It promotes greater intellectual growth and genuine mastery of course content through collaborative activities, frequent feedback, and increased student-teacher and student-student interactions. Traditional lecturing is minimized; active learning and thoughtful integration of content are maximized.

Research indicates learning communities promote student achievement, retention, and progress toward degree completion. Faculty benefit from professional development and training, fresh approaches to teaching, and collaboration with colleagues.

FIRST-YEAR EXPERIENCE PROGRAM (FYE)

The First-Year Experience Program 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 positive, strong start in college. Students who are interested in this program should call (562) 860-2541, Ext. 2782 for more information

WHAT ARE THE BENEFITS OF JOINING A LEARNING COMMUNITY?

• Smooth your transition into college
• Meet other students and form lasting friendships
• Reinforce learning in one class while working on projects in the other
Learn how to choose your major and reach your academic goals sooner
Graduate or transfer to a four-year college or university sooner
Increase your learning and earn better grades

Are Learning Community courses transferable?
Many of the courses are transferable to the CSU's and UCs. See the Schedule of Classes or the Cerritos College Catalog to check specific courses.

What are the requirements to enroll?
The only requirement is that you must enroll in all the courses listed for that Learning Community. The prerequisites are listed in the Cerritos College Catalog and must be met prior to enrollment.

Are Learning Community courses more difficult?
No, you will not be required to do more work than if you took the two classes separately. In fact, by taking the courses in a learning community, you may find that material is easier to understand.

How will Learning Community courses be listed on my transcript?
Your transcript will reflect the classes as separate courses.

HOW DO I REGISTER?

MyCerritos
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
When a student enrolls in a group of two or more courses as part of a learning community or FYE House, 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>Less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>FW</td>
<td>Failing, due to lack of participation and failure to withdraw</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>Pass (at least satisfactory, the equivalent of a &quot;C&quot;; units awarded not counted in GPA)</td>
<td>-</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass (less than satisfactory or failing; units not counted in GPA)</td>
<td>-</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>-</td>
</tr>
<tr>
<td>MW</td>
<td>Military Withdrawal (without penalty)</td>
<td>-</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>-</td>
</tr>
<tr>
<td>*RD</td>
<td>Report Delayed</td>
<td>-</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 Records and 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.
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 $3 is charged for each regular transcript; a $10 fee is charged for each rush transcript (2-hour turnaround). Failure by a student to pay proper financial obligations due to the college or district may result in the withholding of grades, transcripts, diplomas, or registration privileges or any combination thereof. (California Code of Regulations, Title 5, Section 59410).

**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 higher.

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, Records and Services 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, 30, 31, 32
- MATH 20, 40
- READ 41, 43, 46

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

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, Records and Services 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
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, Records and Services 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, Records and Services 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 F-1 status 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:

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

* Also satisfies the Writing Proficiency Requirement for the AA degree.

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

Students wishing to apply AP credits towards transfer general education and unit requirements should consult the table on the Transfer Center website at www.cerritos.edu/transfer.

Students wishing to apply AP credits towards transfer major requirements should consult the receiving institution’s policy which can often be found in the receiving institution’s university catalog. A Cerritos College counselor may help you with your inquiries.
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 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</td>
<td>6</td>
<td>6 d. (1)</td>
</tr>
<tr>
<td>**Mathematics</td>
<td>6</td>
<td>6 d. (2)</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>6</td>
<td>6 a.</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6</td>
<td>6 b. (3)</td>
</tr>
<tr>
<td>Humanities</td>
<td>6</td>
<td>6 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, Records and Services 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. However, plagiarism, cheating, and other forms of academic dishonesty are violations of the college's official Standards of Conduct.

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 co-sponsors with the district such activities as touchtone registration, athletics, choir, band, forensics, drama, and student newspaper.

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

STATEMENT OF STUDENT RIGHTS AND RESPONSIBILITIES

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

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

Students should exercise their freedom with responsibility so as not to endanger the rights, goals and beliefs of other students. Cerritos College should be open to all qualified students regardless of race, color, national origin, ancestry, sex/gender, age, religion, marital status, disability, Vietnam Veteran status, or sexual orientation.

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 subjected only to those policies, requirements, and regulations 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 laws as others and may incur penalties prescribed by civil authorities when violating these laws. Only where the college's interests as an academic community are distinct and clearly involved should the special authority of the college be asserted.

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

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

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

It is incumbent upon student editors and managers to act according to the highest ethics of responsible journalism. This corollary responsibility includes careful adherence to the laws of libel and good taste, and such considerations as the avoidance of indecency, undocumented allegations, attacks on personal integrity, and the techniques of harassment and innuendo and should allow adequate space for rebuttal and differing views in regard to articles in which there is some controversy. Safeguards to assure freedom of the student press with responsibility should include freedom from censorship or arbitrary control of the press, and protection of editors and managers from arbitrary attack, suspension, or removal because of disapproval of editorial policy or content by any external influence.
STUDENT GRIEVANCE PROCEDURES
A student of the College may address grievances as applied to and regarding academic, administrative, and instructional matters relating to students, and including, but not limited to, any grievance dealing with any academic or management employee of the District.
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 addressed within this administrative procedure. Student should refer to “Student Grade Grievance Procedure.”
The determination of whether the Statement of Grievance presents sufficient grounds for a hearing shall be based on the following:
• The statement contains facts which, if true, would constitute a grievance under these procedures;
• The grievant is a student, which include applicants and former students;
• The grievant is personally and directly affected by the alleged grievance;
• The grievance was filed in a timely manner;
• The grievance is not clearly frivolous, clearly without foundation, or clearly filed for purposes of harassment.
If the grievance does not meet each of the requirements, the Office of Judicial Affairs or ASCC Chief Justice or designee shall notify the student in writing of the rejection of the request for a grievance hearing, together with the specific reasons for the rejection and the procedures for appeal.
GRIEVANCE PROCEDURE (Except Grades and Grading, Sexual Harassment, and Other Illegal Discrimination):
STEP I - INFORMAL ACTION
A. The student with a grievance shall first attempt to resolve the matter by informal discussion with the employee(s) involved.
B. If the problem is not resolved in step I-A, the student shall then attempt to resolve the matter by informal discussion with the person at the lowest level of supervisory authority for the person with whom there is a complaint.
C. If the grievant still believes the issue has not been resolved satisfactorily after Step I-B, a student Statement of Grievance Form may be obtained from the Office of Judicial Affairs. After completion of the Form, specifying the time, place, nature of the complaint and remedy or correction requested, it should be submitted to the Coordinator of Student Judicial Affairs who will send a copy of the written statement to the ASCC Supreme Court Chief Justice and the Vice President of Academic Affairs. This statement must be submitted within 30 instructional days after the grievant has become aware of the act or condition on which the complaint is based. An instructional day is defined as any day Monday through Friday that all normal college business is conducted, both in the classroom and administrative offices. All weekend days and college holidays are excluded.
D. The ASCC Chief Justice or Court designee shall attempt to resolve the problem through informal meeting and discussion among the pertinent parties while remaining neutral on all issues involved. This informal meeting and discussion is intended to include the levels of management or administration concerned with the problem and should be completed within ten instructional days, as such days are defined herein. In the event the informal procedure fails, then the formal procedure may be implemented.
STEP II - FORMAL ACTION
A. PRELIMINARY STEPS
1. If the grievant does not believe the grievance has been resolved, then the grievant may request Step II-Formal Action through the ASCC Chief Justice. The Chief Justice upon receiving the request of the grievant shall call a meeting of the Student Grievance Hearing Committee. The Hearing Committee will be composed in the following manner:
• ASCC Chief Justice or designee and two Court Justices or designees,
• the Vice President of Academic Affairs or administrative designee,
• the Faculty Senate President or Senate designee, and
• one Faculty Senate member, chosen by the Faculty Senate.
If replaced per section II.A.5. herein, the ASCC Chief Justice or designee or Court Justices or designees substitute(s) shall be appointed by the ASCC Court.
2. The Chief Justice or designee shall serve as the Hearing Committee Chair, but shall have no vote in committee decisions. The five voting members of the Hearing Committee may be selected within the first six weeks of the academic year. Names selected by the Faculty Senate are to be submitted to the Chief Justice. Members of the Committee are to serve for an academic year.
3. The Vice President of Academic Affairs or administrative designee shall serve as Hearing Committee Executive Secretary. The Executive Secretary, a voting member of the committee, shall be responsible for keeping necessary records of committee hearings and assist the ASCC Chief Justice in the conduct of the hearing.
4. Grievance Committee members are to deal with all grievances in a confidential manner, except when both parties agree to a public hearing or otherwise required by law.
5. No person shall serve as a member of a Hearing Committee if that person has been personally involved in any matter giving rise to the grievance, has made any statement on the matters at issue, or could otherwise not act in a neutral manner. Any party to the grievance may challenge for cause any member of the hearing committee prior to the beginning of the hearing by addressing a challenge to the Hearing Committee Chair, who shall determine whether cause for disqualification has been shown. If the Hearing Committee Chair determines that sufficient grounds for removal of a member of the committee have been presented, the Hearing Committee Chair shall remove the challenged member or members and request a substitute from the original appointing constituent group.
B. FORMAL HEARING
The Hearing Committee shall conduct its proceedings according to the following procedures:
1. The Hearing Committee must meet within 15 instructional days after informal action has been completed and the grievant has requested a formal hearing.
2. The Chair must notify the parties involved within five instructional days before the hearing of the date, time, and location of the hearing and must include a copy of the written complaint, a copy of the Statement of Student Rights and Responsibilities, and copy of the Grievance Procedure.
3. Four members shall constitute a quorum by which Hearing Committee business may proceed. The quorum must include at least one student member, one faculty member, and one administrative member.

4. The members of the Hearing Committee shall be provided with a copy of the grievance and any written response provided by the respondent before the hearing begins.

5. Both parties shall have the right to present personal statements, testimony, evidence, and witnesses. Formal rules of evidence shall not apply. Any relevant evidence shall be admitted. Unless the Hearing Committee determines to proceed otherwise, each party to the grievance shall be permitted to make an opening statement. Thereafter, the grievant or grievants shall make the first presentation, followed by the respondent or respondents. The grievant(s) may present rebuttal evidence after the respondent(s)’ evidence. The burden shall be on the grievant or grievants to prove by substantial evidence that the facts alleged are true.

6. Each party shall have the right to be present, to be accompanied by the person of his or her choice (who may not participate in the hearing), and to question witnesses who are present. In a closed hearing, witnesses shall not be present at the hearing when not testifying, unless all parties and the committee agree to the contrary.

7. The hearing shall be recorded by the Coordinator of Judicial Affairs either by audio recording or stenographic recording, and shall be the only recording made. No witness who refuses to be recorded may be permitted to give testimony. The audio or stenographic recording shall remain in the custody of the District, at all times, unless released to a professional transcribing service. Any recognized party to the grievance may request a copy of the recording.

8. The Hearing Committee Chair shall, at the beginning of the hearing, ask each person present to identify themselves by name, and thereafter shall ask witnesses to identify themselves by name.

9. The Hearing Committee shall discuss the stated grievance(s), hear testimony, examine witnesses, and receive all available evidence to the charge.

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

11. The Hearing Committee shall make decisions in private. The Hearing Committee shall write up findings and decisions. Copies of findings and decisions, including majority and minority reports, are to be sent to each party and the President/Superintendent. The Hearing Committee’s decision(s) shall be final unless appealed.

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

13. Retributions of any kind will not be taken by the District or any of its agents against any party of interest or any other participant in the grievance procedure by reason of such participation.

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

15. If the grievant does not act within the time limits provided herein, the ability to proceed with the grievance shall be terminated and no further action will be taken.

16. 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.

17. The Hearing Committee shall attempt to reach a decision by discussion and consensus on a workable solution. Voting should be a last course of action.

18. 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 30 instructional days after the grievant should have reasonably become aware of the act or condition on which the complaint is based.

APPEALS PROCESS

1. If a party wishes to formally appeal a recommendation of the Hearing Committee, an appeal must be submitted within ten instructional days to the College President/Superintendent provided the President/Superintendent is not a direct party to the grievance. If the President/Superintendent is a direct party to the grievance, and either party is dissatisfied with the recommendation of the Hearing Committee, an appeal may be submitted to a Vice President/Assistant Superintendent 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/Superintendent or alternate may accept or reject the Hearing Committee’s decision.

3. If the President/Superintendent or alternate rejects the Hearing Committee’s decision, he or she shall submit his/her decision to the Board of Trustees for a final decision.

4. The President/Superintendent shall transmit his or her final decision to the parties within ten instructional days.

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

6. The President/Superintendent or Board of Trustees may reject a Hearing Committee decision only after reviewing a transcription of the involved hearing.
STUDENT GRADE GRIEVANCE PROCEDURE
A student of the College may present a grade grievance. The California Education Code, Section 76224, quoted, 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 incompetence, shall be final.” “Mistake” may include, but is not limited to, errors made by an instructor in calculating a student’s grade and clerical errors.

STEP I – INDIVIDUAL ACTION
A student who believes a final course grade was assigned due to mistake, fraud, bad faith, or incompetence shall meet with the faculty member to resolve his/her concern.

STEP II – MANAGEMENT ACTION
1. The student will obtain a Grade Grievance Form from the Office of Student Judicial Affairs.
2. The student must return the Grade Grievance Form to the Office of Student Judicial Affairs within 30 instructional days after the completion of the course about which the grade grievance is 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 Student Judicial Affairs will meet with the student and review the completed Grade Grievance Form. If the student wishes to pursue the grievance, the Coordinator of Student Judicial Affairs will sign and date the Form.
4. The Coordinator of Student Judicial Affairs will present a copy of the Grade Grievance Form to the applicable 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 Student Judicial Affairs and is dated. The Division Dean shall make a recommendation to the parties within ten instructional days.

STEP III – ADMINISTRATIVE ACTION
If either party is dissatisfied with the recommendation of the Division Dean, he or she may appeal the matter to the Vice President of Academic Affairs or designee within ten instructional days of the Division Dean’s recommendation. The Vice President of Academic Affairs or designee shall call a meeting with the student, the ASCC Chief Justice, the 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 instructional days as such days are defined herein.

STEP IV – PRESIDENT/SUPERINTENDENT ACTION
If either party is dissatisfied with the recommendation of the Vice President of Academic Affairs, he or she may appeal the matter to the President/Superintendent of the College within ten 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/Superintendent. The President/Superintendent will review the recommendation and if needed, request persons involved in the grievance to meet.

The President/Superintendent shall make a recommendation within ten instructional days. If either party is dissatisfied with the recommendation of the President/Superintendent, an appeal of the President/Superintendent’s recommendation may be submitted to the Board of Trustees by either party. The appeal must be submitted within ten instructional days after the President/Superintendent’s recommendation. The Board may review an appeal for two 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.

STANDARDS OF CONDUCT
The President/Superintendent shall establish procedures for the imposition of discipline on students in accordance with the requirements for due process of the state and federal laws and regulations.

The procedures shall clearly define the conduct that is subject to discipline, and shall identify potential disciplinary actions, including but not limited to the removal, suspension, or expulsion of a student.

Due process requires that in all significant disciplinary situations, a student is informed of charges against him/her, is given an opportunity to refute them, and has the opportunity to appeal a decision.

The Board of Trustees shall consider any recommendation from the President/ Superintendent for expulsion. The Board of Trustees shall consider an expulsion recommendation in closed session unless the student requests that the matter be considered in a public meeting. Final action by the Board of Trustees on the expulsion shall be taken at a public meeting.

The procedures shall be made widely available to students through the College catalog and other means.

Students enrolling in Cerritos College assume an obligation to abide by all District regulations on District-owned or controlled property or at District-sponsored or supervised functions.

Students who fail to adhere to District regulations are subject to disciplinary actions.

In all disciplinary actions, the student shall be informed of the nature of the charges against him/her and given a fair opportunity to refute them. The District shall not be arbitrary in its actions.

The following conduct while on District-owned or controlled property or at District-sponsored or supervised functions shall constitute good cause for discipline, including but not limited to the removal, suspension, or expulsion of a student.

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. Unauthorized conduct while on District-owned or controlled property or at District-sponsored or supervised functions shall constitute good cause for discipline, including but not limited to the removal, suspension, or expulsion of a student.

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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, or engaging in other academic dishonesty including copying from another's work; discussion prohibited by the instructor; obtaining exam copies without permission; and using notes, other information, or devices that have been prohibited.
12. Misrepresentation and/or impersonation, including arranging for or allowing another individual to impersonate or otherwise misrepresent himself or herself to be a student generally or to be a particular student either in person or in an online environment, and/or impersonating or otherwise misrepresenting oneself to be another person in person or in an online environment.
13. Plagiarism, in individual or group work or in a student publication, including 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.
14. Dishonesty; forgery; alteration or misuse of District documents, records, or identification; or knowingly furnishing false information to the District.
15. Unauthorized entry upon, into, or use of District facilities, either in person or in an online environment.
16. Lewd, indecent or obscene conduct on District-owned or controlled property, or at District-sponsored or supervised functions.
17. 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.
18. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
19. 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.
20. 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.
21. Sexual assault and/or battery; rape, including acquaintance rape; or physical abuse of another person.
22. Misrepresentation of oneself or of an organization to be an agent of the District.
23. 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.
24. Abuse of any person or any possession of any person, on District-owned or controlled property.
25. 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.
26. Abusive behavior directed toward coercion of, or hazing of a member of the college community.
27. 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; arranging for, allowing, and/or impersonation of one person by another; 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.
28. 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.
29. Violation of a duly issued restraining order, stalking, and/or a pattern of conduct with intent to follow, alarm, or harass another person, and which causes the person to reasonably fear for his or her safety, and where the pattern of conduct persisted after the person has demanded that the pattern of conduct cease.
30. Failure to identify oneself when requested to do so by District officials acting in the performance of their duties.
31. Any other cause not listed above which is identified as "Good Cause" by the Education Code or that disrupts the college, its mission, or campus life.

**STUDENT DISCIPLINE PROCEDURES**

Judicial Programs should contribute to the teaching of appropriate individual and group behavior as well as to protecting the campus community from disruption and harm. The Programs should be conducted in ways that will serve to foster the ethical development and personal integrity of students and the promotion of an environment that is in accord with the overall educational goals of the institution.

The Office of Judicial Affairs is responsible for the student conduct and disciplinary procedures of the college. Inquiries should be directed to the Coordinator of Judicial Affairs in the Office of Student Activities.
Disciplinary Sanctions

Official Reprimand – Defined as 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.

Disciplinary Probation – Defined as disciplinary action that may include, but is not limited to, 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.

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

Immediate Interim Suspension – The President/Superintendent or designee may order immediate suspension of a student where he or she concludes that immediate suspension is required to protect lives or property and to ensure the maintenance of order. In cases where an interim suspension has been ordered, the time limits contained in these procedures shall not apply, and all hearing rights, including the right to a formal hearing where a long-term suspension or expulsion is recommended, will be afforded to the student within ten instructional days.

Suspension – Defined as exclusion from the College for a specified period of time.
1. Suspensions shall be initiated by the President/Superintendent or designee.
2. The duration of the suspension from one or more classes shall be for a period of up to ten days of instruction, for the remainder of the 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 instructional days.

Expulsion – 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 indefinitely.
3. The expulsion is noted in the permanent file of the student.
4. Re-admittance after expulsion requires Board approval.

Hearing Board
The suspension or expulsion of a student shall be accompanied by a hearing.
A Hearing Board shall be responsible to the President/Superintendent for reviewing and making recommendation to the President/Superintendent. Membership of the Hearing Board shall include the following:
1. Two members of the instructional staff appointed by the Faculty Senate.
2. Two student Court Justices appointed by the ASCC Chief Court Justice or by the Associated Students President, if the Chief Court Justice is a party to the matter.
3. The Coordinator of Student Judicial Affairs or a member of the management staff of the college appointed by the President/Superintendent. The manager shall serve as the Chairperson of the Hearing Board, but will not vote except to break a tie.

Procedures for a Hearing, Disposition, and Imposition of Sanctions
1. Written notice of a hearing shall be mailed or delivered to the student. A hearing must be held within ten instructional days of the suspension if the suspension is immediate. 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, the opportunity of the student to appear in person, and the opportunity to present oral and documentary evidence.
3. Hearings shall be conducted in the manner consistent with the orderly conduct of the affairs of the College, and which seems to the Hearing Board to be most conducive to the determination of the truth.
4. All hearings shall be tape recorded. A transcript shall be made available to parties directly involved, at their own expense. Transcripts may be redacted to comply with law, policies, and to protect the privacy and/or safety of individuals.
5. Promptly following the hearing, the Hearing Board shall submit the recommendation to the President/Superintendent. The President/Superintendent and/or designee shall make the final decision on suspensions. A decision of the President/Superintendent to suspend shall be issued to the student in writing. Expulsion requires action by the Board of Trustees. A decision of the Board of Trustees to impose expulsion shall be reached no later than the next regularly scheduled regular Board meeting after the Board receives the recommendation from the President/Superintendent. Notification of the Board’s decision regarding expulsion shall be issued to the student in writing after the action by the Board.

Time Limits - Any times specified in these procedures may be shortened or lengthened if there is mutual concurrence by all parties.

These procedures may change from time to time and may be superseded by current state and federal laws and regulations. Otherwise, the College Catalog, which is updated annually, contains the most recent information regarding student discipline procedures.
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/gender, 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/gender, 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, sex/gender, age, religion, marital status, disability, Vietnam Veteran status, 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
Cerritos College Board Policy 3410 states 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. A student or interested party may also file a complaint directly with the Office of Civil Rights.

Section 504/508 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, Soccer, Swimming, Tennis, Track & Field, Water Polo, and Wrestling. Football is a member of the Southern California Football Association.
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
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 and Services 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 Programs and Services 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.
Individuals with a disability may receive support services and instruction from Disabled Student Programs and Services 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: enrollment, 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 www.cerritos.edu/dsps.

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 adaptive physical education classes.
Instructional Support Center

The Instructional Support Center provides disability management, instruction, and technology support services to students with all types of disabilities. Services available include: pre-registration, interpreters and real time captioning, textbooks on tape, liaison with instructors and other campus offices, tape recorder and calculator loan, liaison with Regional Center and other agencies. The ISC also houses the Assistive Training and Information Center and Alternate Media Production Center for those students in need of alternative text or adapted access to computers. Brailled and large print texts and instruction in screen reader programs such as JAWS and voice activation software such as Dragon Dictate are present at this location. Adapted equipment and software is also located throughout the campus. An Independent Mediation Lab providing specialized instruction in approaches to accommodate the limitations of a cognitive disability is also available.

Learning Evaluation Center

The Learning Evaluation Center provides learning disability evaluations and follow-up referrals to appropriate DSPS centers and campus resources. These services include:

- Screening, testing, and certification of learning disabilities.
- Recommends academic accommodations according to the unique assessment data gathered.
- Refers students to the Instructional Support Center for in-class support services and to learn assistive technology.
- Instruction on assistive technology, learning strategies, and universal design for learning.
- Educates students on their unique learning strengths and weaknesses profile to prepare them for self-advocacy and success.

The Learning Evaluation Center will provide outreach to the Cerritos College campus and high schools within the Cerritos College district.

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 all enrolled 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 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. 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, chiropractic services, referrals to psychological and optometric services, and a variety of support services (pharmacy, laboratory, health education, etc.). Accident, international student, and supplemental insurances are also available through the SHS. We invite you to visit our website at www.cerritos.edu/health or call (562) 860-2451, 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, crisis intervention, and referrals are available to students experiencing emotional problems or concerns. Please contact 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 at (562) 860-2451, Ext. 2480.

Extended Hours

During the first two weeks 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 anytime throughout the year. The Bookstore shall purchase used textbooks adopted for the next academic term in quantities sufficient to meet course requirements at up to 50% of the purchase price. The Bookstore shall purchase used books not adopted for the next academic term or in excess of course requirements at published national market value.

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. Additional food services and vending machines are located throughout the campus.

CAREER AND ASSESSMENT SERVICES

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 for Needy Families (TANF), are in good standing with the college, and have developed or are in the process of developing a welfare-to-work plan with the local county welfare office. The program provides eligible students with counseling, educational and career planning, job search assistance, referrals to campus and community based organizations, up-to-date information regarding Welfare Reform Rules, and advocacy with the Department of Public Social Services (DPSS). For eligible students, the CalWORKs program also provides work-study opportunities and payment for childcare services during class and work hours.

The CalWORKs office is located in the Career Services Center. To make an appointment with a CalWORKs Counselor, please call (562) 860-2451, Ext. 2356. For additional information, please visit our website at www.cerritos.edu/calworks.

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. 2356, 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/studentServices/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

The Cerritos College Child Development Center is a Nationally Accredited Program that services students, college employees and the community. The Center is also a laboratory school for future teachers in the field of Early Childhood Education. Our purpose is to provide a safe, nurturing, exceptional early childhood education program for children from 2½ – 5 years old. Inspired by the schools of Reggio Emilia, Italy, we use a constructivist approach to learning. Cerritos College Child Development Center is open from 7:30 a.m. – 5:00 p.m., Monday through Friday. We foster an emergent curriculum, one that arises out of the children's interests and responses to the prepared indoor and outdoor classroom environment and their experiences. We offer three types of programs:

1) The Preschool Program serves children from ages 2½ – 5 years old and is available for full-time care anytime from 7:30 a.m. – 5:00 p.m. Part-time care is available Monday through Friday from 8 a.m. – 1 p.m.
2) The LAUP Program: The Los Angeles Universal Preschool program serves children turning 4 years old by December 2 and provides a school readiness program. We offer two sessions: a morning session that meets from 8:30 a.m. – 12:00 p.m., Monday through Friday, and an afternoon session from 1:00 p.m. – 4:30 p.m., Monday through Friday.
3) Pre-Kindergarten Family Literacy Program: This program serves children who will turn 4 years of age by December 2, and offers a language-rich and print-rich environment in which to develop language and school readiness skills. This program is funded by the State Department of Education and families must meet the income and need eligibility requirements for no fee or reduced fees. PKFLP is available Monday through Friday from 7:30 a.m. – 5:00 p.m.

Students interested in these services must contact the Child Development Center and fill out a Request for Child Care Application or call (562) 860-2451, ext. 2407, for additional information.

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, 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 Lab (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 Monday through Saturday during the regular school year. For hours of operation, please call the Library at (562) 860-2451, Ext. 2430, or visit the website at www.cerritos.edu/lrc.

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.
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.

PRESIDENT’S LIST
Full-time students with 12 units earned or more of college-level courses in a single semester and who achieve a 4.0 grade point average within those units earned will qualify for the President’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 throughout the year. The Cerritos College Federal School 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 a student's file may be closed.

It is suggested that students take the assessment test, complete the financial aid required forms, and schedule an appointment with an academic counselor to prepare an educational plan each semester. Students must also enroll in courses recommended by their counselor, which lead to a certificate, associate degree, or transfer major. Approximately four weeks after a student has mailed or electronically submitted the application, he/she should receive a Student Aid Report (SAR). Once students receive a missing information letter, they should submit all required forms to the Financial Aid Office. If determined eligible, the student will receive an award letter. Grants are disbursed throughout the semester. Please refer to the scheduled disbursement dates on the website at www.cerritos.edu/finaid.

SATISFACTORY ACADEMIC PROGRESS

A 2.0 cumulative grade point average must be maintained for all college work to be eligible for financial aid. Students must also complete a required number of units based on enrollment status each semester.

<table>
<thead>
<tr>
<th>Units Enrolled for Semester</th>
<th>Units Required to Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>12+</td>
<td>at least 9</td>
</tr>
<tr>
<td>9 – 11.5</td>
<td>at least 7</td>
</tr>
<tr>
<td>6 – 8.5</td>
<td>at least 5</td>
</tr>
<tr>
<td>less than 6 units</td>
<td>all units</td>
</tr>
</tbody>
</table>

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. All students on financial aid are given a satisfactory academic standards booklet. It is the student's responsibility to read and understand information in the Financial Aid Satisfactory Academic Progress (SAP) Standards.

For additional information on financial aid, students are encouraged to visit the Financial Aid Office website at www.cerritos.edu/finaid or contact the Financial Aid Office at (562) 860-2451, extension 2399.

Questions about financial aid can also be answered through online Financial Aid TV video clips at http://cerritos.financialaidtv.com.

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.

Federal Supplemental Educational Opportunity Grant (FSEOG) is awarded to eligible undergraduate students with exceptional financial need. It is awarded on a “first-come, first-served” basis and is dependent upon funds available. Students must have a zero EFC and be enrolled in at least six units in order to be considered for this grant.

Federal Work-Study (FWS) is a 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 approximately 15 hours per week on or off campus. Students must submit a separate FWS application in addition to the FAFSA to apply for FWS.

Academic Competitiveness Grant (ACG) 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, certificate, or transfer program, (2) enrolled in at least 6 units, and (3) be 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 the 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 complete a Free Application for Federal Student Aid (FAFSA) 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 $10,500 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, must appeal to the Loan Coordinator. Appeal forms are available at the Financial Aid Office or on the financial aid website. In reviewing a request for any loan, the Loan Coordinator 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.

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.

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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 B Entitlement Awards** are for 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). This Entitlement Award provides up to $1,551 for books and living expenses for the first year. Beginning with the second year of Cal Grant B benefits, this award also helps pay for tuition and fees at public or private four-year colleges or other qualifying institutions.

**Cal Grant B Competitive Awards** are for students who aren’t eligible for the Entitlement awards. Awards are for students who have at least a 2.0 GPA, meet all the Cal Grant requirements and apply by either the March 2nd or September 2nd deadline. The award provides up to $1,551 for books and living expenses for the first year. Beginning with the second year of Cal Grant B benefits, this award also helps pay for tuition and fees at public or private four-year colleges or other qualifying institutions.

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

**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), 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 BOGF A or B standards, complete a FAFSA, enroll in 12 units, meet with an EOPS counselor three times during each semester, and have earned less than 70 degree applicable units from ALL colleges/universities attended.

**CARE Grant** is available to students who are current recipients of TANF in 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 Fee Waiver (BOGFW)** is a program that provides assistance to cover community college enrollment fees and the student activity fee. 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)/CalWORKs, Supplemental Security Income (SSI)/State Supplemental Program (SSP), or General Assistance (GA). Documentation is required; or
2. Student must meet income standards based on family size. Documentation may be required; or
3. Student must have applied for FAFSA and demonstrate financial need.

**SCHOLARSHIPS**

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

**AB540**

California’s AB540 law allows qualifying students, including undocumented immigrant students, to pay in-state fees at public colleges including Cerritos College. A student must attend a California high school for 3 years or more; graduate from a California high school or receive the equivalent of a high school diploma (such as a GED); and file an affidavit with the admissions office stating that they will file an application to adjust their immigration status as soon as they are eligible. Students should inquire at the Admissions Office about applying for AB540. AB 540 students are encouraged to search for scholarships for funding their education. Scholarship information can be found at [www.maldef.org](http://www.maldef.org) and [www.latinocollegedollars.org](http://www.latinocollegedollars.org).

**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:

\[
\text{Number of days completed} \div \text{Total number of days in the semester} \times 100
\]

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, Records and Services 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 Bachelor's 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.

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, VEAP, Vocational Rehabilitation, or Survivors and Dependents of deceased or disabled veterans.

Staff is available to provide help with processing applications and to do check 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, Records and Services 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 and 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 higher (2.0) in all courses.
B. A student must achieve a grade of Pass, or "C", or higher in each course to be counted for the major. Courses completed for a Certificate of Achievement that are also to fulfill requirements for the major in an AA Degree must be completed with a grade of Pass, or "C", or higher.
C. A minimum of 12 units of degree applicable work must be completed at Cerritos College, to meet the residence requirement.

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, Records and Services 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 must be met 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 Associate in Arts Degree" 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.

English/Reading Course Limitations

Students completing both English 52 and Reading 54 will be able to count the units from only one course towards the associate in arts degree. Please see a counselor for further information.

Cerritos College Catalog
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 2009-10

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 Advanced Math Readiness test sufficient for placement in a course above the level of MATH 80 or MATH 80B.
   b. Completion of MATH 80 or MATH 80B with a grade of Pass, or “C”, or higher.
   c. For other options, see your counselor.

3. READING PROFICIENCY REQUIREMENT: This requirement can be met by one of the following options:
   a. Earn a score on the reading proficiency test sufficient for placement in a course above the level of READ 54.
   b. Completion of READ 54 with a grade of Pass, or “C”, or higher.
   c. For other options, see your counselor.

**NOTE:** Students completing both English 52 and Reading 54 will be able to count the units from only one course towards the associate in arts degree.

4. WRITING PROFICIENCY REQUIREMENT: Completion of ENGL 100 with a grade of Pass, or “C”, or higher.

5. HEALTH AND WELLNESS PROFICIENCY REQUIREMENT: This requirement can be met by one of the following options:
   a. Completion of at least one unit of a Physical Education activity course from the approved department list below:
   b. Completion of HED 100, 101, 103, or 200; TH 140-143; MUS 160-164; HO 100, 151 or 152; CDEC 161; 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 SCIENCES 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 103, 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 successfully passing the College Board’s Advanced Placement Exam, American History. Unit credit is awarded for passing the AP exam option with a score of 3 or higher.)

(2) Political Science 101 or 201
   (This requirement can be met by successfully passing the College Board’s Advanced Placement Exam, Government and Politics: United States. Unit credit is awarded for passing the Advanced Placement exam option with a score of 3 or higher.)
(3) Social and Behavioral Sciences
   Administration of Justice 101
   Anthropology 100, 120, 170, 200, 201, 202, 203, 205
   Child Development 110
   Child Development/Early Childhood *113
   Counseling **150, 200
   Economics 101, 102, 201, 202, 204
   Environmental Policy 200
   Finance 125
   Geography 102, 105
   History 110, 120, 204, 210, 220, 221, 230, 235, 241, 242, 245, 246, 250, 255, 260, 265, **270, 275
   Journalism 100
   Physical Education 106
   Political Science 110, 210, 220, 230, 260
   Psychology 101, 150, 251, 261, 271
   Sociology 101, 110, 120, 201, 202, 205, 210, 215, **225, 230, 250
   Speech 110
   Women's Studies 101, 106, 202, 204, 205, 206

c. FINE ARTS AND HUMANITIES: 3 UNITS MINIMUM FROM EITHER FINE ARTS OR HUMANITIES.

   (1) FINE ARTS
      Architecture **110, 112
      Art 100, 101, 102, 103, 104, 105A, 105B, 106, 107, *108, *109, 110, **113, 116, 120, 130A, 144, 150, **186, **192, 193
      Dance 100, 101
      Humanities: *108, *109
      Music 100, 101, 102, 103, 104, 104B, 105
      Photography 100, **150, 160
      Theatre 101, 102, 103, 104, **110, 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, 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 100

(2) COMMUNICATION AND ANALYTICAL THINKING
   Business Communication **148
   Computer and Information Sciences **101, **102, **103, **178
   Engineering Design Technology **131
   English 101, 103
   Mathematics **80, **80B, 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

   e. Select an additional general education course 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 2009-10 school year and thereafter. Students who enrolled prior to Fall 2009 and who have maintained continuous attendance at Cerritos College have the option of meeting the current requirements or those in effect at the time continuous attendance began.
Associate in Arts Degree for General Education 2009-10

Plan B

CSU General Education Requirements

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

To earn an Associate in Arts Degree using Plan B, students must complete a minimum of 60 degree applicable units with an overall grade point average of "C" (2.0), 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 CSU Ge 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 higher 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
      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.
Take one course in category 1, 2 and 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
   Environmental Policy 200
   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, 205, 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
   Child Development *110
   Counseling 200
   Finance 125
   Health Education 100, 101
   Health Occupations 152
   Physical Education *106, 141
   Psychology *150, 245
   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 courses offered by Cerritos College can be found on the ASSIST website at www.assist.org.
Associate in Arts Degree for General Education 2009-10

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 higher 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 higher, 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 this 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
Environmental Policy 200
Geography 102, 105
Physical Education 106
Political Science 101+, 201+, 210, 220, 230
Psychology 101, 150, 251, 261, 265, 271
Sociology 101, 110, 120, 201, 202, 205, 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 higher.
   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 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.

INDEPENDENT AND OUT-OF-STATE COLLEGES AND UNIVERSITIES
TRANSFER REQUIREMENTS

There are many choices for transfer students when deciding to earn a bachelor’s degree and beyond. In addition to the California State University and University of California systems, there are many California independent institutions. There are also many colleges, private and public, located throughout the United States to which Cerritos College students can transfer. Each of these institutions has its own unique requirements for admission. In order to determine eligibility, students should refer to the school’s catalog or website and consult with a counselor at Cerritos College and/or the university of choice.

GENERAL EDUCATION REQUIREMENTS FOR INDEPENDENT AND OUT-OF-STATE COLLEGES AND UNIVERSITIES

In planning for transfer, students should consider the general education requirements for all institutions of interest. Many in-state independent institutions accept CSU General Education and IGETC. Students transferring to independent or out-of-state institutions should refer to the school’s catalog or website and meet with a counselor in order to determine appropriate general education requirements. Cerritos College has articulated general education requirements with a number of independent institutions. You can visit the Transfer Center’s website at www.cerritos.edu/transfer for a complete list of articulation agreements.

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 higher 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 higher 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 higher 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 are required. In addition, you must have completed at least 30 semester (45 quarter) units of college courses with a grade of “C” or higher 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. The ENGL 100, oral communication, critical thinking, and transferable mathematics courses must be completed with a grade of “C” or higher.

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 and ACT are available from school and 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.

THE LOWER-DIVISION TRANSFER PATTERNS (LDTP) PROJECT

The Lower-Division Transfer Patterns (LDTP) Project, sponsored by the California State University (CSU) and supported by the California Community Colleges, presents potential transfer students with a set of “road maps” to follow that are designed to ensure appropriate academic preparation for studies at CSU and that will decrease time to graduation once these students enter the CSU. The LDTP for each major-related discipline has statewide as well as campus-specific components. The statewide component of the LDTP is appropriate for any CSU campus
that offers the major and is comprised of general education coursework as well as some courses within the major discipline. The campus-specific component identifies major-related coursework at the specific CSU campus. Together these components for an LDTP discipline will generally total at least 60 units, the number needed to transfer to CSU as an upper-division student.

Forty-four disciplines have developed patterns. Thirty-two are published on the LDTP website. For the most current information about the patterns and course descriptors, please see http://www.calstate.edu/acadaff/ldtp/.

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

The California Administrative Code, Title 5, relating to the California 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 California State University.

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

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

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

In general, four-year colleges accept at full unit value approved transfer courses completed with satisfactory grades in the public Community Colleges of the state. However, in most instances a maximum of 70 community college semester units (105 quarter units) can be transferred for credit toward a degree at the senior institution.
STATE UNIVERSITY GENERAL EDUCATION 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 higher 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
      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
   3. 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 Ideas)
      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
         Environmental Policy 200
         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, 205, 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
- Child Development *110
- Counseling 200
- Finance 125
- Health Education 100, 101
- Health Occupations 152
- Physical Education *106, 141
- Psychology *150, 245
- 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 courses offered by Cerritos College can be found on the ASSIST website at www.assist.org.

University of California
Transfer Requirements

The University of California considers you a transfer applicant if you graduated from high school and enrolled in a regular session at another college or university. You cannot 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. For assistance in planning for transfer to the University of California, see a community college counselor or university advisor. Many of the university advisors are available for appointments through the Transfer Center.

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 three ways in which you can meet the University's minimum admission requirements for transfer students. These requirements are described below. Please note that even though options 1 and 2 are possible, the number of University of California campuses actually accepting students with these two options is very limited.

*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 higher 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.

Courses Transferable 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 2009-10 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 campus. 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 higher. 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, Records and Services.

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

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
   English 102, 106, 221A, 221B, 222, 223, 224, 225, 226, 227, 228,
   248A, 248B
   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
Environmental Policy 200
Geography 102, 105
*265, *275
Physical Education 106
Political Science 101+, 201+, 210, 220, 230
Psychology 101, 150, 251, 261, 265, 271
Sociology 101, 110, 120, 201, 202, 205, 210, 215, 250
Speech 110
Women’s Studies 101, 106, 202, 204, 205, 206

Philosophy 103
Psychology 103
Speech 235
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 higher.
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.
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. Bilingual English and Spanish support is provided. Adult Education courses include categories such as:

- Apprenticeship
- Courses for Immigrants - Citizenship
- Elementary and Secondary Basic Skills - GED
- English as a Second Language
- Occupational Preparation
- Older Wiser Learner (OWL)
- Vocational English as a Second Language

OWL courses are designed to meet the special needs of older adults. OWL courses are noncredit, open entry/open exit, and have no registration fees. Courses include:

- Arts & Crafts
- Computers
- Cooking
- Harmony Chorus, Community Chorus
- Memoir Writing
- Music
- Senior Exercise
- Senior Topics

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.

**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 local companies and industries including aerospace, advanced manufacturing, clean energy, utility and public works, grocery and others.

Services and programs provided by the OED include management training, composites and high tech manufacturing, rapid prototyping, leadership development, language training, as well as seminars, conferences and forums on innovative business processes and technologies. Consultant and technical assistance services are available to work with businesses in developing any program that is not already offered.

**COMMUNITY EDUCATION**

The Community Education department promotes the concept of lifelong learning for the general population. This department provides fee-based not-for-credit classes, workshops and programs that can be taken by members of our community of any age (from 18 months to 90+ years).

We have a wide variety of course offerings for adults in the topic areas of professional development, entrepreneurship & career, personal enhancement, healthy living, enrichment & interests and motorcycle training programs. For those under the age of 18, we offer classes in academics, art, music and athletics & movement. Also for this age group, we have a well-established and reputable Summer College for Youth program that runs for eight weeks in the summer where students can choose from over 180 classes.

Community Education offers classes/programs throughout the year – the schedule of classes for our department is published four times a year and mailed out to over 160,000 homes in our community. To find out about the specific classes we offer that might be of interest to you, come by our office to pick up a copy of our latest schedule of classes. We are located in the Community Education building in the far southwest corner of campus, north of New Falcon Way. Our office hours are Monday through Thursday, 8 a.m. – 7 p.m.; Friday, 8 a.m.-4 p.m.; and Saturday, 8 a.m.-12 p.m. You may call us at (562) 860-2451, Ext. 2521, with questions, to register, or to get a schedule of classes mailed to you. You can view our class/program offerings and register anytime 24/7 on our website, www.cerritoscommunityed.com.

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

**ADULT EDUCATION/DIVERSITY PROGRAMS**

Pathway Programs Department's mission is to create career pathways for in-school youth and out-of-school adults with multiple entry and exit points. Pathways provide clearly delineated steps for students to follow in order to obtain skills that will enable them to obtain a sustainable job and/or continue their education beyond Cerritos College.

Pathway Programs events, services and programs include:

- Career Pathways Fair
- Middle School Career Exploration Fairs and Workshops
- Career Exploration and Basic Vocational Skills Workshops
- Counseling
- Job Development
- Secondary Articulation Agreements
- Tech Prep
- CAHSEE Preparation Program
- Pre-Apprenticeship Program in the Construction and Building Trades
- Solidworks manufacturing project
- Worker retraining

For more information, call (562) 860-2451, Ext. 2487.
Cerritos College Foundation

The Cerritos College Foundation, a non-profit organization organized in 1979, serves as a charitable vehicle for the community, individuals and alumni, to assist with financial support to Cerritos College beyond that 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 22 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) Sandra Mardonovich, winner of the Cheryl A. Epple Memorial Scholarship and Mr. Tom Jackson, Cerritos College trustee.
ADMISIÓN AL COLEGIO

La admisión a Cerritos College está abierta a cualquier graduado de preparatoria (o escuela secundaria) o su equivalente, a personas de dieciocho años de edad o mayores que muestren capacidad de poder beneficiarse con la enseñanza. Los estudiantes que tengan 18 años de edad que no hayan obtenido un diploma de preparatoria o su equivalente, deberán cumplir con el criterio de admisión de Cerritos College que consiste en obtener un puntaje satisfactorio en las áreas de matemáticas, lectura y/o escritura. Cualquier estudiante que solicite a cualquier colegio comunitario de California está sujeto a requisitos de residencia que son determinados por el estado de California. Un estudiante, cuya residencia legal se encuentra dentro del estado de California, es elegible para asistir a Cerritos College. Los residentes de cualquier otro estado o país extranjero serán sujetos a una colegiatura foránea.

La residencia legal de cualquier estudiante con estado civil soltero menor de 18 años de edad es basada en la residencia del padre o tutor. Todo estudiante deberá estar listo para presentar prueba de residencia en California.

Cerritos College no discrimina en contra de ninguna persona en empleo ni a personas que participen en el colegio ni por su raza, color, religión, orientación sexual, género, discapacidad ni edad.

Para preguntas adicionales podrán dirigirse a la Oficina de admisión y de registro al (562) 860-2451, ext. 2211, o a la siguiente página electrónica www.cerritos.edu/admissions.

Solicitud de admisión

Todos los estudiantes que soliciten la admisión a Cerritos College deben presentar una solicitud de admisión en la Oficina de admisión y de registro (Se recomienda someter su solicitud lo más temprano posible). Es responsabilidad de los solicitantes presentar información honesta y verdadera; cualquier información falsa dada deliberadamente en la solicitud o en la verificación de residencia puede ser motivo de expulsión del Colegio.

Tan pronto como la Oficina de admisión y de registro reciba su solicitud, la procesará y le proporcionará la fecha y hora en que usted deberá inscribirse ya sea por medio del portal MyCerritos o TeleFalcon. Además, un número de identificación será asignado a cada solicitante. Dicho número de identificación será necesario para completar el proceso de matriculación: examen de evaluación y ubicación, cita en el centro de consejería y asesoría académica y de matriculación.

Certificado de estudios

Podrá ser necesario que usted someta su historial académico de escuelas previas, tales como preparatorias, colegios y/u universidades para establecer su elegibilidad a clases que requieran prerequisitos. Los certificados de estudios que verifiquen los créditos de otras instituciones podrán ser usados para completar los requisitos de educación general de CSU, IGETC, certificados de culminación de cursos, grado de asociado de las artes.

Solicitud e Inscripción de Admisión especial de menores

Admisión especial de menores es estudiantes inscritos en grados K-12 sin diplomas de secundaria quienes pueden a la vez beneficiarse de “un avance educativo o una carrera técnica/vocacional.”

Estudiantes intermedios y avanzados de preparatoria (Programa Puente Universitario)

1. Directores de escuelas secundarias o encargados deben respaldar y verificar con firma y consentimiento en la Forma de admisión especial de menores a estudiantes capacitados para recibir instrucción académica universitaria.

2. El padre o tutor debe aprobar la participación del estudiante con firma y consentimiento en la forma Admisión especial de menores. Firma del padre o tutor que certifique que el estudiante seguirá las normas y reglas del Colegio.

Elegibilidad Académica

- Todo estudiante que desee inscribirse en cursos para cualquier carrera, debe tener un promedio de calificación de la preparatoria de 2.0 o más alta en su más reciente certificado de estudios.
- Para inscribirse en cualquier curso, el estudiante deberá completar el proceso de evaluación apropiado y tener los pre-requisitos y/o co-requisitos estipulados del curso deseado.
- Los estudiantes que necesiten asistencia especial debido a una discapacidad, deberán tramitar las gestiones a través de su distrito escolar K-12 en consulta con Programas y servicios para estudiantes con discapacidades (DSPS) en Cerritos College. Por favor llame al número telefónico (562) 860-2451, ext. 2335, para asistencia.

Restricciones de inscripción

- Estudiantes de preparatoria del último año (sénior) o del nivel intermedio (junior) podrán ser permitidos inscribirse hasta un máximo de 8 unidades. Habrá excepciones y serán sujetas a consideración y aprobación por el decano de admisión, registro y asistencia, A, R & S.
- Estudiantes de preparatoria no podrán inscribirse en cursos pre-universitarios (1-99) o cursos de educación física.
- Estudiantes de preparatoria no podrán inscribirse en cursos universitarios para compensar una deficiencia de sus cursos preparatorios.
- Todo estudiante que se haya inscrito previamente y que haya dado de baja sus clases y/o no haya hecho un progreso satisfactorio, no le será permitido continuar en el Programa Puente Universitario.
- Ningún estudiante de preparatoria obtendrá estatus de prioridad de inscripción y será responsable por todos los cobros y cuotas aplicables, con la excepción de la cuota de inscripción del estado por unidad de los Colegios comunitarios de California.

Estudiantes de Primaria y Secundaria desde el 10º grado (Programa de Admisión Especial)

1. Directores de escuelas secundarias o encargados deben respaldar y verificar con firma y consentimiento en la forma de Admisión especial de menores a estudiantes que estén capacitados para recibir instrucción académica universitaria.

2. El padre o tutor debe aprobar la participación del estudiante con firma y consentimiento en la forma Admisión especial de menores. Firma del padre o tutor que certifique que el estudiante seguirá las normas y reglas del Colegio.

Cerritos College admitirá a estudiantes de primaria y secundaria con talento extraordinario a partir del 10º grado siempre y cuando reúnan los requisitos estipulados a continuación:

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Elegibilidad académica
- El estudiante debe tener un promedio de calificación de 2.5, o más alta, en su más reciente certificado de estudios.
- Para inscribirse en cualquier curso, el estudiante deberá completar el proceso de evaluación del colegio y satisfacer los prerequisitos y/o co-requisitos estipulados del curso deseado.
- Los estudiantes que necesiten asistencia especial debido a una discapacidad, deberán tramitar las gestiones a través de su distrito escolar K-12 en consulta con Programas y servicios para estudiantes con discapacidades (DSP&S) en Cerritos College. Por favor llame al número telefónico (562) 860-2451, ext. 2335, para asistencia.

Restricciones de inscripción
A estudiantes en esta categoría se les permitirá inscribirse con un máximo de 4 unidades por semestre; la admisión a cursos está sujeta a la disponibilidad de cupo; se requiere la aprobación y firma del instructor antes de querer inscribirse así como también
- no podrán inscribirse en cursos pre-universitarios (1-99) o cursos de educación física.
- no podrán inscribirse en cursos universitarios para compensar una deficiencia de sus cursos primarios o secundarios.
- todo estudiante que se haya inscrito previamente y que haya dado de baja sus clases y/o no haya hecho un progreso satisfactorio no le será permitido continuar en el Programa especial de admisión.
- ningún estudiante obtendrá estatus de prioridad de inscripción y será responsable por todos los cargos y cuotas aplicables, con la excepción de la cuota de inscripción del estado por unidad de los Colegios comunitarios de California.

Inscripción de verano de estudiantes del nivel K-12
Además de lo anterior mencionado, estudiantes menores de edad que deseen asistir a cursos de verano deberán de cumplir con las siguientes condiciones:
- El estudiante deberá demostrar preparación adecuada en la materia solicitada.
- Los cursos pre-universitarios de inglés y matemáticas podrán tomarse siempre y cuando el estudiante haya agotado todos los recursos para inscribirse en los cursos equivalentes en su escuela actual.

Para asistir a Cerritos College a través del Programa Puente Universitario o Programa de Admisión Especial, siga los siguientes pasos a continuación:
1. Complete la Forma de admisión especial de menor (marque el casillero Puente Universitario o Admisión Especial) y la solicitud de admisión de Cerritos College.
2. Escoja la(s) clase(s), tome las pruebas de evaluación y ubicación y complete los pre-requisitos.
3. Admisión especial de estudiantes del nivel K-10 deberán obtener la aprobación del Decano de admisión, registro y asistencia (A, R & S) antes de inscribirse.

Se recomienda que estudiantes del Programa Puente Universitario (11-12) se entrevisten con un consejero académico y participen en una Orientación Estudiantil de Nuevo Ingreso.

Para más información, comunicarse al (562) 860-2451, ext. 2211.

MATRICULACIÓN
La matriculación es un proceso diseñado tanto para ayudar a estudiantes en su planeación de estudios como a escoger y lograr sus metas educativas. El proceso invita al estudiante a incorporarse al colegio en un común acuerdo para lograr las metas docentes del estudiante a través de programas, reglamentos y requisitos ya establecidos por el colegio. El acuerdo señala responsabilidades tanto del colegio como del estudiante para lograr dichos objetivos. El objetivo primordial de matriculación es el éxito del alumno.

A continuación se listan los componentes básicos de común acuerdo entre el colegio y el estudiante.

**El colegio se compromete en proporcionar:**
- Una solicitud y un proceso de admisión.
- Una orientación acerca de programas y servicios del Colegio.
- Una evaluación de las destrezas de estudios del estudiante, de la competencia lingüística en inglés, de las destrezas de computación, aptitudes en general, metas, destrezas de aprendizaje, aspiración de carreras, rendimiento académico y necesidad de servicios especiales.
- Consejería y asesoramiento para desarrollar un plan de estudios.
- Un seguimiento en el progreso de evaluación del estudiante para lograr una meta educativa.

**El estudiante se compromete a:**
- Expresar un amplio interés en el campo educativo una vez admitido al Colegio.
- Optar por una carrera educativa antes o durante el término en el que el estudiante complete 15 unidades.
- Asistir a clases.
- Trabajar diligentemente para completar las asignaturas del curso.
- Demostrar un esfuerzo para obtener una meta educativa.
- A todo estudiante de nuevo ingreso se le requiere participar en todas las actividades de matriculación en conjunto. Los estudiantes que hayan completado un grado de asociado o más alto en una institución de educación superior están exentos de participar en actividades en conjunto. Sin embargo, todo estudiante exento tendrá que participar en una parte del proceso de matriculación.
- Hay acomodamiento especial disponible a estudiantes con discapacidades físicas, de comunicación o aprendizaje, o quienes estén en el programa de ayuda financiera y sean identificados para ser elegibles para recibir EOPS. Contacte el centro de consejería para más detalles. Véase más abajo el perfil y las normas generales diseñadas para ayudarlo a completar el proceso de matriculación.
- En caso que no cumpla las normas de matriculación, o que no declare un gol educativo para desarrollar un plan de estudios universitario, se suspenderán los servicios de matriculación al estudiante.
- Para más información visite el sitio web para matriculación: www.cerritos.edu/counseling.

Admisión
Complete la solicitud de admisión y sométala a la Oficina de admisión y Registro de Cerritos College, localizada en el edificio de Administración o en línea: www.cerritos.edu. Puede someter en línea la
solicitud a través del sitio web www.cerritos.edu y seleccione el portal “MyCerritos” y luego “Student Application – Online”. Certificados de estudios de otras instituciones tendrán que comprobar la elegibilidad de prerequisitos ya que es estrictamente verificado a la hora de inscribirse.

**Orientación**

Después de haber cumplido con las pruebas de evaluación, inscribase para un taller de orientación en la recepción de la Oficina de consejería o haga una cita al teléfono (562) 860-2451, ext. 2231. Hay siempre talleres de orientación en los turnos matutinos y vespertinos.

Talleres del turno matutino: información acerca del campus, pasos a seguir para registrarse y una guía por el campus.

Los talleres del turno vespertino son diseñados para los adultos que retornan a la escuela. Los talleres incluyen información del campus Y pasos a seguir para registrarse.

Se les aconseja a los estudiantes que pasen por una evaluación ANTES de asistir a talleres de orientación.

Talleres de orientación y clases de planeación educativa están disponibles a lo largo del semestre. Hay talleres de orientación disponibles en línea en el sitio web del colegio a través de www.cerritos.edu/counseling.

**EXENTOS:** Los estudiantes readmitidos y de traslado.

**Examen de evaluación/ubicación**

El centro de examen de evaluación y ubicación está localizado en Administración al costado del Centro de carreras y servicios.

“Examen de evaluación/ubicación” es el proceso de reunir información individual del estudiante para facilitar su éxito. En Cerritos College, la evaluación incluye, pero no se limita a, la recopilación de información pertinente a las habilidades de estudio del estudiante, competencia en el leguaje de inglés, destrezas de computación, revisión de planes de estudios preparatorios o universitarios, pruebas de certificados de estudios o grado de asociados de educación superior de instituciones acreditadas, destrezas de aprendizaje, rendimiento académico, y la urgencia de servicios especiales. Además, el asesoramiento de carreras le da la oportunidad de explorar y aspirar a carreras, goles, intereses y fomentar valores.

**¿Necesito tomar un examen de evaluación/ubicación?**

Si planea matricularse en matemáticas, inglés, ESL (inglés como segundo idioma), o a una clase de lectura o si planea estudiar un grado de asociado, se recomienda rotundamente que tome los exámenes de evaluación/ubicación antes de inscribirse.

**Nota:** Las excepciones enumeradas son evaluaciones como opción para autorización o ubicación. Para completar las secciones apropiadas de lectura, matemáticas e inglés para obtener un grado de asociado en las artes, verifique en su catálogo escolar o pregunte a un asesor académico.

**Horario de exámenes de evaluación/ubicación**

Hay folletos disponibles en la Oficina de admisión y de registro, de Asesoría y consejería, de Centro de carreras y servicios, y en el sitio web del colegio en www.cerritos.edu/assessment-center o llame al (562) 860-2451, ext. 2355 para fechas y horarios.

**Exentos de examen de evaluación/ubicación**

Los estudiantes que ya cuenten con un grado de asociado en las artes o un nivel más alto no se les requiere que tomen los exámenes de evaluación/ubicación, pero se les requerirá para verificar que presenten su historial oficial académico a la Oficina de admisión y Registro por lo menos una semana antes de inscribirse.

**Exceptos de evaluación individual para ubicación de un curso**

**Inglés**

Si Ud. ha completado Inglés 100 (antiguamente Inglés 1) o un equivalente a tres o cuatro unidades de un curso de composición de nivel universitario con una calificación de “C” o más alta en un colegio acreditado, Ud. está exento de tomar el examen de inglés de evaluación/ubicación. Por favor someta prueba oficial (historial académico o certificado de estudios) a un asesor o consejero académico.

**Matemática básica**

Si Ud. ha completado Álgebra 1 o un nivel más alto con una calificación “B” o más en una preparatoria o un colegio acreditado, Ud. está exento de tomar el examen de evaluación básico de matemáticas. Por favor someta prueba oficial (historial académico o certificado de estudios) a un asesor o consejero académico antes de inscribirse.

**Matemática avanzada**

Los estudiantes que lograron pasar Matemáticas 60 (antiguamente Matemáticas 30) en el Examen básico de matemáticas pueden tomar los Exámenes de matemáticas avanzada adecuados para determinar el nivel de matemáticas.

Los estudiantes pueden ser ubicados en cursos avanzados de matemáticas basados en la calificación de “B” o más en los cursos de álgebra completados recientemente en la preparatoria o en el colegio. Es rotundamente recomendado que dichos cursos de matemáticas hayan sido completados dentro de los últimos tres años. Prueba de calificaciones de la preparatoria o colegio es requerida.

**Cursos avanzados de ubicación**

A los estudiantes que hayan participado en los cursos avanzados de ubicación en sus respectivas preparatorias con resultados de 3, 4, o 5 en el examen avanzado de ubicación del consejo universitario, se les otorgarán unidades aplicables para el diploma de grado de asociado.

**Química**

Favor de leer la sección de prerequisitos y recomendaciones listados en cada clase de química. Asegúrese que los prerrequisitos sean obtenidos antes de inscribirse en un curso.

**Asistencia en inglés como segundo idioma**

Los estudiantes que planean tomar cursos de ESL (inglés como segundo idioma) necesitan tomar el examen de ubicación CELSA.

**¿Puedo volver a tomar un examen?**

Los estudiantes pueden repetir cualquier examen de evaluación una vez DESPUÉS de un semestre de periodo de espera.

**Asistencia para individuos con discapacidades**

Cualquier estudiante con discapacidades auténticas puede buscar asistencia alternativa para la administración de exámenes de ubicación en las áreas de inglés, lectura, matemáticas y ESL. Antes de pedir cualquier acomode, una solicitud de ingreso a Cerritos College deberá estar vigente. Reservaciones por adelantado podrán ser hechas a través del Programa y servicios para estudiantes con discapacidades, (562) 860-2451, ext. 2333. Métodos alternativos de administración de exámenes incluirán tiempo ilimitado, letras amplificadas, lups o la ayuda de un lector o un escribidor.
Consejería y asesoría académica
Todo estudiante recién ingresado se les aconseja que hagan una cita con un consejero/asesor académico para autorizar un curso antes de inscribirse. Los estudiantes que estén bajo un periodo de prueba de progreso o periodo de prueba académico son requeridos completar un contrato con un consejero antes de inscribirse. Los estudiantes que no hayan optado por un rol educativo y estudiantes que estén inscritos en pre-cursos básicos universitarios se les requiere rotundamente que se reúnan con un consejero o asesor académico para desarrollar un plan educativo de estudios.

Se les fomenta a todos los estudiantes que se reúnan con un consejero o asesor académico por semestre para cerciorarse que su plan educativo refleje fielmente su meta educativa.

Seguimiento
El centro de consejería y asesoramiento y la facultad docente proporciona un número de servicios de seguimiento a los estudiantes matriculados. Esos servicios están diseñados para proveer información pertinente al progreso académico del estudiante. Los servicios especiales proporcionados a los estudiantes no son conocidos a estudiantes que estén en un periodo de prueba académica y de progreso, a estudiantes en cursos básicos, y a estudiantes que estén indecisos acerca de sus planes educativos. Se remitirán a estudiantes a servicios fuera o dentro del campus según sean apropiados.

¿Qué son prerrequisitos, co-requisitos y recomendaciones?
Es determinación de Cerritos Community College guiar a los estudiantes en los cursos en los cuales ellos tendrán la mayor probabilidad de un éxito académico. Por lo tanto que el estudiante se encontrará con cursos que tengan prerrequisitos, co-requisitos y/o recomendaciones. A lo anterior describe una necesidad específica de conocimiento o destreza que debe de ser aprendida antes que el estudiante intente con éxito continuar al segundo nivel del curso. Por ejemplo, Inglés 52 deberá tomarse antes que Inglés 100. Este es el ejemplo de un curso que debe tomarse en secuencia. Se les exhorta a los estudiantes a que consulten las descripciones de los cursos en el catálogo del colegio para identificar los prerrequisitos de un curso.

Los estudiantes actualmente matriculados en un curso con prerrequisitos en Cerritos College serán permitidos inscribirse en el siguiente curso en secuencia. Por ejemplo, los estudiantes inscritos en Inglés 52 durante el semestre de otoño podrán inscribirse en Inglés 100 para el semestre de primavera. Sin embargo es la responsabilidad del estudiante asegurarse que ha pasado el curso de prerrequisito. Si recibe una calificación insatisfactoria, el estudiante será dado de baja durante el curso del semestre.

Los prerrequisitos verificados electrónicamente impedirán al estudiante inscribirse en una clase que tenga prerrequisitos y que no hayan sido satisfactoriamente terminados. Los prerrequisitos son verificados al momento de inscribirse (ya sea por medio automático o cuando el instructor agrega a un estudiante). Los prerrequisitos no son verificados cuando el estudiante selecciona del menú para agregarlos a la "canasta de compra virtual".

Para evitar ser denegada la inscripción, los estudiantes deben de completar los exámenes de ubicación de Cerritos College y someter los certificados de estudios si los prerrequisitos de los cursos son completados en otra institución. Los certificados de estudios son aceptados en la Oficina de administración y Registro, o baje la forma de la siguiente página electrónica [www.cerritos.edu/counseling](http://www.cerritos.edu/counseling).

A continuación están las definiciones de los prerrequisitos, co-requisitos y/o recomendaciones de cursos:
1. Un prerrequisito es cualquier requisito que deberá cumplirse antes que un estudiante pueda inscribirse en un curso. En otras palabras, un “prerrequisito” significa un curso que a un estudiante se le requiere completar para probar que está listo para inscribirse en un curso o programa educativo.
2. Un “co-requisito” significa un curso que a un estudiante se le requiera tomar conjuntamente con otro curso. Por ejemplo, si un estudiante se inscribe en Farmacia 60, deberá tomar Farmacia 60L en conjunto.
3. Cuando se hace una “recomendación” para prepararse para un curso es una sugerencia altamente recomendada para antes o durante el trayecto de un curso o un programa educativo pero no es requisito.
5. Una “nota satisfactoria” significa que, para el curso en cuestión, en el historial académico del estudiante se ha anotado con un símbolo de “A”, “B”, “C”, o “P”.

¿Qué significa “desafiar” un prerrequisito?
Un prerrequisito podrá ser desafiado por estudiantes que hayan presentado razones válidas. Es la responsabilidad del estudiante de proveer información que apoye su petición. El prerrequisito a desafiar debe de ser solicitado y resuelto antes que el estudiante se inscriba en el curso. La forma para disputar un prerrequisito puede obtenerse en la Oficina de admisión y Registro, en el centro de consejería y asesoramiento académico, o bajarla de la página electrónica [www.cerritos.edu/counseling](http://www.cerritos.edu/counseling).

Los estudiantes pueden desafiar un requisito usando el siguiente procedimiento:
1. Complete la forma para disputar un prerrequisito.
2. Seleccione una de las cinco opciones listadas en la forma:
   A. El prerrequisito tiene prejuicios o está aplicado de una manera discriminatoria.
   B. El estudiante puede demostrar que posee el conocimiento equivalente al prerrequisito.
   C. El prerrequisito del curso no se ofrece dentro de un periodo razonable.
   D. El estudiante se le requiera completar para probar que está listo para inscribirse en un curso o programa educativo.
   E. El estudiante se les fomenta a que consulten las descripciones de los cursos en el catálogo del colegio para identificar los prerrequisitos de un curso.
3. Someta la forma completada de su petición a registro de estudios. Los servicios especiales proporcionan un número de servicios de seguimiento a los estudiantes matriculados. Ese servicio está diseñado para proveer información pertinente al progreso académico del estudiante. Los servicios especiales están diseñados para proveer información que apoye su petición. El prerrequisito a desafiar debe de ser solicitado y resuelto antes que el estudiante se inscriba en el curso. La forma para disputar un prerrequisito puede obtenerse en la Oficina de admisión y Registro, en el centro de consejería y asesoramiento académico, o bajarla de la página electrónica [www.cerritos.edu/counseling](http://www.cerritos.edu/counseling).
4. Si la solicitud es aprobada, el estudiante se le requerirá tomar conjuntamente con otro curso. Por ejemplo, si un estudiante se inscribe en Farmacia 60, deberá tomar Farmacia 60L en conjunto. No hay ningún proceso de apelación.
5. Si la solicitud para desafiar un requisito es negada, el estudiante deberá obtener el prerrequisito siguiendo el requisito oficial del curso. No hay ningún proceso de apelación.
INFORMACIÓN DE MATRICULACIÓN

Consejería y asesoría académica
Es de mayor importancia saber que cada estudiante inscrito en Cerritos College cuenta con un centro de servicio detallado y extenso de consejería y asesoría académica proveído para asistir a los estudiantes a que logren sus metas académicas de una manera eficiente, completa y sin contratiempos. Los cambios constantes de prerequisitos y de requisitos por otras instituciones y centros ocupacionales, hace que el contacto continuo del personal de Consejería y asesoría académica sea una parte vital para el éxito y experiencia académica del estudiante.

Los servicios de consejería y asesoría académica consisten en cuatro funciones principalmente:
(1) asistencia en planear programas académicos;
(2) asistencia en explorar perspectivas y posibilidades de carreras educativas;
(3) consultas y remisiones de problemas personales;
(4) suministros adicionales de servicios auxiliares tales como clases de superación personal, asistencia para transferirse a otra institución, remisiones a agencias exteriores, orientación de clases y asistencia en interpretación de idiomas.

Estos servicios diversos son ofrecidos por personal profesional entrenado y acreditado para ayudar a estudiantes en las áreas de interés propio. El personal de Consejería y asesoría académica opera en conjunto con todas las divisiones docentes del colegio y se mantiene al tanto de programas educativos tanto dentro del campus como de otras universidades.

Aunque el uso de servicios de Consejería y asesoría académica es de acuerdo voluntario, todo estudiante de primer año, estudiantes en periodo de prueba, estudiantes trasladados de otras escuelas, estudiantes de F-1 VISA, y estudiantes que reciben ayuda financiera se les requiere hacer cita con a un asesor académico para planear y aprobar un plan académico antes de inscribirse. Generalmente el estudiante deberá reunirse con su asesor una vez por semestre. Las citas para consejería deberán hacerse en persona en el Centro de consejería y asesoría académica localizado en el edificio de Administración o por teléfono (562) 860-2451, ext. 2231. También hay citas limitadas sin previo aviso. Ayuda académica general está siempre disponible en línea en la página www.cerritos.edu/counseling.

Debido a la alta demanda de estudiantes que solicitan servicios de consejería y asesoría académica antes de comenzar un nuevo semestre, no hay citas disponibles durante las primeras cuatro semanas antes de comenzar cada semestre. Solamente citas sin previo aviso están disponibles durante este tiempo. Contacte el Centro de consejería y asesoría académica cuatro horas con antelación para citas sin previo aviso.

Plan de estudios
Los estudiantes deben de tomar los cursos en secuencia. Una vez tomado un curso de cierto nivel, los alumnos no recibirán crédito por cursos que son de un nivel más bajo a los que ya se hayan tomado.

Admisión a clases
Los estudiantes deberán estar oficialmente inscritos antes de asistir a cualquier clase. Si a los alumnos les es imposible asistir al primer día de clases, deberán agotar todos los recursos por contactar al instructor o de lo contrario el instructor podrá darlos de baja por “ausencia”.

Los estudiantes que quieran ingresar a una “clase llena”, deberán estar presentes el primer día de clases. Los instructores podrán agregar a estudiantes a sus clases dependiendo de la disponibilidad de lugares y si los estudiantes han cumplido satisfactoriamente con sus prerequisitos, si es aplicable.

Oyentes
Es permitido asistir de oyente a Cerritos College. Un oyente es un estudiante que asiste a una clase o clases sin recibir créditos en su certificado oficial de estudios. Para ingresar de oyente a cualquier curso será posible solamente con la aprobación del instructor para cualquier estudiante que desee tomar un curso ya sea para superación personal o repasar una materia. Los estudiantes que deseen asistir de oyente deben estar conscientes que los cursos que sean tomados como oyente NO aparecerán en el certificado oficial de estudios. Para cursos de oyente no es necesario tener prerequisitos.

1. Los estudiantes no podrán asistir de oyente a un curso a menos que hayan agotado todas las posibilidades para tomar el curso por crédito.
2. Permiso para entrar de oyente a un curso es concedido bajo criterio del instructor y con el consentimiento firmado por el instructor.
3. Una vez firmado el consentimiento, el estudiante se podrá inscribir para recibir el estatus de oyente después del primer día de clases. (El primer día de clases es considerado el primer día que empieza la clase.)
4. Un estudiante oyente puede revertir el estatus de oyente a crédito para recibir crédito por sus clases antes de finalizar la 5ª semana de clases del ciclo escolar semestral o antes del 30% del término de una clase si es un curso de un periodo corto, con la firma autorizada por escrito por el instructor. El pago de clases para oyentes no es reembolsable y los pagos para clases de crédito deberán ser pagados al contado a la hora de elegir el opción para recibir crédito.
5. Un estudiante que optó por crédito puede revertir el estatus de crédito a estudiante oyente antes de finalizar la 5ª semana de clases del ciclo escolar semestral o antes del 30% del término de una clase si es un curso de un periodo corto, con la firma autorizada por escrito por el instructor. El pago de clases con opción crédito no es reembolsable después de la fecha tope para recibir reembolsos y todos los pagos para clases de estatus oyente deberán ser pagados al contado a la hora de elegir la opción oyente.
6. Los estudiantes con opción crédito tienen prioridad sobre los estudiantes con estatus de oyentes.
7. La cuota de clases para oyentes es de $20.00 dólares por unidad (además de la inscripción estudiantil). Estudiantes inscritos en 10 o más unidades pueden asistir gratis de oyente hasta 3 unidades (puede ser una clase de 3 unidades). Los $20.00 dólares por unidad para clases para oyentes automáticamente serán cobrados si el estudiante baja de 10 unidades.

Procedimiento para agregar clases
Si usted desea agregar clases a su plan de estudios, por favor siga los siguientes pasos:

1. Complete la boleta para Agregar/Dar de baja (disponible en la Oficina de admisión y de registro) o puede agregar a través del portal MyCerritos o por Falcon Phone.
Información en Español – Information in Spanish

2. Si la clase está llena, vaya al salón el primer día cuando comienza la clase; esté a tiempo. Pida amablemente al instructor que desee agregar la clase; si el instructor lo aprueba, usted no tendrá que hacer nada, la inscripción se hará electrónicamente directamente a la Oficina de admisión y de registro. Se revisará su recibo académico para verificar que cumpla con los prerequisitos y que no tenga cuenta pendiente. Se les requiere a todos los estudiantes que hagan sus pagos a la hora de inscribirse. A los estudiantes que se agreguen a la lista de espera se les aplicarán las cuotas de inscripción pertinentes. Si fallan en pagar las cuotas de inscripción dentro de siete (7) días hábiles, se les dará de baja de los cursos y/o de la lista de espera. Por favor revise su estado de cuenta a través del portal MyCerritos, Falcon Phone o en la Oficina de admisión y registro. Sus matriculaciones deberán ser completadas para las fechas tope publicadas oficialmente.

3. No podrán agregar un curso si tienen una restricción o intentan repetir un curso sin autorización previa. (Vea Repetición de cursos)

Procedimientos para darse de baja

De acuerdo a la ley Title 5, sección 58004 y a las normas de Cerritos College, es la responsabilidad del estudiante de participar enteramente en clases una vez que la inscripción ha sido completada. Sin embargo, si hay la necesidad de dar de baja una clase, es la responsabilidad del estudiante de llevar firmada la boleta para dar de baja a la Oficina de Admisión y Registro.

Se recomienda que los estudiantes tomen la iniciativa de oficialmente darse de baja ellos mismos. Si fallan en darse oficialmente de baja en un curso, como resultado podrán obtener una nota “F” por cada curso y no tendrán acceso a su cuenta estudiantil.

Para darse de baja oficialmente después de que el periodo de inscripción termine, pueden darse de baja a través del portal MyCerritos al sitio web www.cerritos.edu o a través de Falcon Phone. Asegúrese de verificar que se haya dado de baja e imprima un acusado de recibo.

Las fechas tope para dar de baja una o más clases deberán llevarse a cabo el último día de la 14º semana de un semestre de 18 semanas o cuando se complete el 75% de un término de estudios de menos de 18 semanas o lo que suceda primero. Los archivos académicos de un estudiante que continúe en clases después de la fecha permitida para darse de baja, se les marcará con un símbolo que indique curso autorizado, otro símbolo que no sea una “W”.

El símbolo “W” es considerado “dada de baja confirmada” y no se usará para calcular el promedio de calificación. Sin embargo, el exceso de "W" se usará para determinar factores de periodo de prueba o de expulsión. De igual forma un estudiante que tenga una “W” en la misma clase dos o más veces, pierde el privilegio de prioridad para registrarse para esa clase. Los estudiantes pueden someter la solicitud Petición para repetir un curso, la cual puede ser aprobada o rechazada, a Registro académico y Comité de regulaciones para una excepción al reglamento para repetir curso por exceso de “W”.

Dar de baja una clase después de la fecha tope

Los estudiantes deberán de haber documentado las circunstancias que pasaron más allá de su control para haberse dado de baja. Ejemplos de dichas circunstancias incluyen, pero no se limitan, lo siguiente: accidentes, enfermedad, cambio de horario en su sitio laboral u otras circunstancias que se puedan documentar. Una “W” oficialmente será anotada permanentemente en su certificado de estudios. Haga una cita con el director de la Oficina de admisión si necesita más información.

Lista de espera

Cerritos College utiliza el sistema lista de espera “pre-pagada”. Esto significa que una vez que usted se haya agregado a una lista de espera de un curso, usted debe hacer todos los pagos pertinentes para ese curso. Consecuentemente la “inscripción automática” entrará en efecto. La “inscripción automática” inscribe oficialmente a estudiantes que están en la lista de espera de un curso siguiendo el orden de prioridad una vez que un espacio se haga disponible. Cada estudiante está limitado a un máximo de 10 unidades en la lista de espera. La “inscripción automática” no procederá si:

1. El estudiante tiene una restricción en su cuenta.
2. El prerequisito de la clase no ha sido completado.
3. Repetición no autorizado del curso.
4. Hay un conflicto en el horario de clases. El estudiante no se podrá inscribir simultáneamente en dos clases que tengan el mismo horario.
5. Si usted está inscrito en una clase Y ESTÁ en una lista de espera de la misma clase (ej., si Ud. está inscrito en Sociología 101 y también está en el lugar #1 en la lista de espera de otra clase de Sociología 101) perderá el lugar debido a “inscripción múltiple”.

La inscripción automática estará en efecto durante la primera semana del semestre de 18 semanas y durante el primer día de clases de una sesión corta. La asistencia del primer día de clases es requerida para inscribirse o permanecer en la lista de espera. Si no se presenta a clases NO implica que se dará de baja automáticamente o recibirá un reembolso. Si usted no desea entrar en la clase, por favor dese de baja de la lista de espera para evitar una calificación deficiente o la pérdida de su reembolso.

Unidades de estudios por semestre

Para graduarse en cuatro semestres, los estudiantes deberán cursar entre un promedio de 16 unidades transferibles y acreditables por cada semestre. Los estudiantes que deseen tomar más de 18 unidades por semestre, dichas unidades deberán ser aprobadas por un asesor académico. Otras limitaciones en unidades son:

- Estudiantes extranjeros con visa no menos de 12 unidades.
- Atletas intercollegiales no menos de 12 unidades.

Repetición de cursos

Se permite la repetición de cursos a aquellos cursos cuyas calificaciones son deficientes y que han sido oficialmente registrados. Sólo se podrán repetir una sola vez y la calificación previa y el número de unidades de Cerritos College no se tomarán en cuenta para computar el promedio de calificación general. Cuando una repetición de curso ocurra, el historial académico será permanentemente anotado de una manera entendible y verídica. El sistema de computación automáticamente verifica si el estudiante ha repetido un curso al momento de inscribirse.

Los estudiantes pueden transferir cursos equivalentes de cualquier colegio, universidad o institución académica acreditada para remplazar un curso tomado en Cerritos College que haya tenido una deficiencia académica.

Excepciones a las reglas y regulaciones para repetir un curso

Los estudiantes pueden someter una petición para solicitar una excepción a las reglas a Registro académico y Comité de regulaciones.
Información en Español – Information in Spanish

Ejemplos y excepciones:
1. Estudiantes que hayan recibido dos “W” o la combinación de un curso con calificación deficiente y una “W”.
2. Estudiantes con deficiencias cuyas calificaciones son resultado de circunstancias fuera de su control.
3. Cambios en el currículo escolar.
4. La repetición es necesaria debido a un mandato legal para entrenamiento. *Dichos cursos pueden ser repetidos un sinfín de veces, a pesar de que dicho curso ha sido oficialmente registrado en el plan de estudios o haya tenido una deficiencia en calificación, y la calificación recibida en cada instancia deberá ser incluida en el certificado de estudios como propósito de calcular el promedio de calificación del estudiante (Title 5, Division 6, Ch. 6 Subchapter 9, §55763).

Cambio de domicilio
Cambios de domicilios deben de ser inmediatamente reportados a la Oficina de admisión y Registro. Cualquier negligencia tendrá como resultado el retraso de fechas para inscripción o el retraso de otras notificaciones importantes. Los cambios de domicilio pueden hacerse en línea al sitio web www.cerritos.edu, en el portal My Cerritos.

Unidades
Cada curso tomado vale cierto número de “unidades”. Este número es determinado dependiendo el tipo de clase y el número de horas que dura por semana. Por ejemplo, una clase de lectura de tres (3) unidades (inglés o salud) equivale a tres horas por semana durante el periodo regular de 18 semanas que dura un semestre, pero una clase de laboratorio de una (1) unidad equivale a tres horas por semana.

Crédito de unidades por servicio militar
Soldados que hayan estado al servicio activo por un periodo de un año o más y quienes hayan sido dados de baja honorablemente sin haber desertado podrán recibir cuatro (4) unidades de crédito. Las unidades serán designadas como “Crédito por servicio militar” en el certificado de estudios. Para solicitar estas unidades el militar deberá presentar la forma D.D. #214 a la Oficina de admisión y Registro. Los créditos serán aplicables al Diploma A.A. solamente y no serán aplicables a ningún programa de certificados.

Militares que se dan de baja
De acuerdo al código de educación 66023, el Consejo de administración de fideicomisos de Cerritos College no impugna a estudiantes que se dan de baja de clases y que son miembros activos de la reserva del servicio militar de los Estados Unidos y quienes reciben órdenes para darse de baja de cursos. Después de haberse verificado dichas órdenes, el estudiante será dado de baja por la administración de todos los cursos y un símbolo “MW” que significa dado de baja por asuntos militares será asignado. No habrá sanción por darse de baja por asuntos militares. Darse de baja por asuntos militares no se contará para poner en periodo de prueba académica ni expulsión.

Clasificación de estudiantes

Unidad de primer año (Freshman): Aquellos que han acumulado menos de 30 unidades.

Unidad de segundo año (Sophomore): Aquellos que han acumulado 30 o más Unidades pero menos de 60 unidades, o aquellos que han completado 60 Unidades y que no tienen un certificado.

Estudiante graduado: Aquellos que han obtenido un grado de asociado de las artes o un grado más alto.

Estudiante inscrito en 12 o más unidades.

Admisión especial: Estudiante actualmente inscrito que en el actual grado (K-10th) quien desea inscribirse para obtener crédito universitario.
CURRICULUM AND REQUIREMENTS FOR MAJORS, CERTIFICATES AND TRANSFER PROGRAMS
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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. Pass toward the Certificate of Achievement is not granted for classes taken as part of the Adult Education Program.
7. Courses completed for a Certificate of Achievement that are also to fulfill requirements for the major in an A.A. Degree must be completed with a grade of Pass, or “C” or better.

VERIFICATION OF COMPLETION

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

ACCOUNTING

CAREER OPPORTUNITIES:
Accountant
Tax Preparer
Marketer

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS

*ACCT 101 Fundamentals of Accounting I 4
ACCT 102 Fundamentals of Accounting II 4
ACCT 131 Computerized Accounting-IBM 3
ACCT 133 Computerized Spreadsheet Accounting 3
ACCT 201 Intermediate Accounting I 4
ACCT 202 Intermediate Accounting II 4
FIN 125 Personal Finance 3
or ACCT 60 Quickbooks Accounting 1.5
and ACCT 61 Turbo Tax Accounting 1.5
ACCT 240 Cost Accounting 4
or ACCT 241 Managerial Accounting 4
ACCT 250 Income Tax Accounting 3
or ACCT 130 Payroll Tax Accounting 3
FIN 51 Retirement Planning and Investing 1.5

TOTAL CERTIFICATE REQUIREMENTS: 33.5

*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:

BA 100 Fundamentals of Business 3
LAW 111 Business Law 3
BCOM 147 Business Communications 3

Please see a Business Counselor or the respective Department Chairperson for additional alternatives.

ADVANCED ACCOUNTING

CAREER OPPORTUNITIES:

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS

Complete the Accounting Certificate Requirements plus any three of the following four courses:
ACCT 240 Cost Accounting 4
ACCT 241 Managerial Accounting 4
ACCT 270 Fundamentals of Auditing 3
ACCT 280 Advanced Accounting 3

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:

LAW 110 Business Law 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.

MICROCOMPUTER ACCOUNTING CLERK

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
ACCT 100 Introduction to Accounting 3
ACCT 101 Fundamentals of Accounting I 4
ACCT 131 Computerized Accounting -IBM 3
ACCT 133 Computerized Spreadsheet Accounting 3
FIN 125 Personal Finance 3
or ACCT 60 QuickBooks Accounting (1.5)
and ACCT 61 Turbo Tax Accounting (1.5)
FIN 51 Retirement Planning and Investing 1.5
CIS 102 Introduction to Microcomputer Hardware & Applications Software 3

TOTAL CERTIFICATE REQUIREMENTS: 20.5

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:

*ACCT 130 Payroll Tax Accounting 3
LAW 111 Business Law 3
BCOT 108 WordPerfect for Windows 3.5
or BCOT 112 Microsoft Word (3.5)
BCOM 147 Business Communications 3
INSR 121 Insurance Principles: Property and Liability 3

*Required for Advanced Microcomputer Accounting Clerk Certificate

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:

BA 100 Fundamentals of Business 3
LAW 111 Business Law 3
BCOT 108 WordPerfect for Windows 3.5
or BCOT 112 Microsoft Word (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.

PAYROLL ADMINISTRATION

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
ACCT 60 Quickbooks Accounting 1.5
ACCT 100 Introduction to Accounting 3
ACCT 130 Payroll Tax Accounting 3
ACCT 133 Computerized Spreadsheet Accounting 3
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: 21

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
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.
ADMINISTRATION OF JUSTICE

ASSOCIATE IN ARTS DEGREE

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

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

CAREER OPPORTUNITIES:
Police Officer
Deputy Sheriff
Correctional Officer
Investigator

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 Major Requirements provides the educational potential for advancement to supervisory and management positions or entry to graduate studies or law school.

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.

CORE REQUIRED (21 UNITS)

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

DEPARTMENT REQUIREMENTS

REQUIRED (12 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<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>
<td>3</td>
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</table>

ELECTIVE GROUP

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<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>3</td>
</tr>
<tr>
<td>AJ 173</td>
<td>A.J. Occupational Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>AJ 180</td>
<td>Introduction to Security</td>
<td>3</td>
</tr>
<tr>
<td>AJ 208</td>
<td>Special Issues in Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>AJ 221</td>
<td>Narcotics and Vice Control</td>
<td>3</td>
</tr>
<tr>
<td>AJ 222</td>
<td>Juvenile Procedures</td>
<td>3</td>
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<tr>
<td>AJ 298</td>
<td>Directed Studies</td>
<td>1</td>
</tr>
<tr>
<td>AJ 299</td>
<td>Directed Studies</td>
<td>2</td>
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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>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 103</td>
<td>Legal Research</td>
<td>3</td>
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</tbody>
</table>

TRANSFER MAJOR REQUIREMENTS

LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS

<table>
<thead>
<tr>
<th>Institution</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Dominguez Hills</td>
<td>CIS 101  Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 115  Finite Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>California State University - Fullerton</td>
<td>All classes for the major are upper division and are taken at CSUF.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>See a counselor for recommended lower division electives.</td>
<td></td>
</tr>
<tr>
<td>California State University-Long Beach</td>
<td>AJ 101  Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>There is one required core course that is not currently offered at Cerritos College.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Bachelor of Science in Criminal Justice Program is impacted. The CSU designates major Requirements 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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html">http://www.csulb.edu/depts/enrollment/admissions/impacted_major.html</a></td>
<td></td>
</tr>
<tr>
<td>California State University-Long Beach</td>
<td>AJ 101  Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AJ 102  Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or LA W 116  Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AJ 150  Introduction to Corrections</td>
<td>3</td>
</tr>
</tbody>
</table>

There are two other core courses in police organization and administration and in judicial organization that currently are not offered at Cerritos College.

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

AGRICULTURE

CAREER OPPORTUNITIES:
Food Science
Ranch Soil Management
Conservation
Fish and Game Warden

TRANSFER MAJOR REQUIREMENTS

LOWER DIVISION MAJOR REQUIREMENTS

Typically requires one year of general chemistry and one or two semesters of organic chemistry. May also require statistics or pre-calculus. In addition, animal or plant science majors typically require two semesters of general biology and math or business calculus. Major and Major Requirements may differ from the ones cited here. For exact course requirements, please consult the appropriate major and university at http://www.assist.org

California State Universities and Colleges that offer Agriculture and related Bachelor’s Degrees. Chico, Pomona, Fresno, San Luis Obispo, Stanislaus.

ANTHROPOLOGY

CAREER OPPORTUNITIES:

An undergraduate major or concentration can be part of a broad liberal arts background for men and women interested in medicine, government, business, and law. A doctorate is recommended for full professional status as an anthropologist, although work in museums, physical anthropology labs, and field archaeology is often possible with a master’s degree. Cultural and linguistic anthropologists work in federal, state and local government, international agencies, healthcare centers, nonprofit associations, research institutes and marketing firms as research directors, science analysts and program officers. Biological anthropologists work in biomedical research, human engineering, private genetics laboratories, and pharmaceutical firms. Archaeologists work off campus in environmental projects, human-impact assessment, and resource management. At present there is no discernible limit for Ph.D. anthropologists targeting the nonacademic realm for employment. The global economy's focus on internationalism, information and research and anthropology's world of interests mesh. Today, half of new doctorates find professional jobs off campus. (American Anthropology Association)

TRANSFER MAJOR REQUIREMENTS

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

UNITS

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>ANTH 115</td>
<td>Physical Anthropology</td>
</tr>
<tr>
<td>ANTH 120</td>
<td>Introduction to Archaeology</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

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.

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.

COMMON LOWER DIVISION MAJOR PREPARATION FOR UNIVERSITY OF CALIFORNIA

ANTH 100 Cultural Anthropology 3

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

University of California – Irvine

In fulfillment of the requirements below, a single course may be used only once.

ANTH 115 Physical Anthropology 3
or ANTH 120 Introduction to Archaeology (3)
or ANTH 170 Introduction to Language and Culture (3)

Four Additional Anthropology Courses from the courses listed below:

ANTH 115 Physical Anthropology 3
ANTH 120 Introduction to Archaeology 3
ANTH 200 Native Peoples of North America 3
ANTH 201 Native Peoples of California 3
ANTH 202 The Maya, Inca and Aztecs: Ancient Civilizations of the Americas 3
ANTH 203 The Anthropology of Magic, Witchcraft, and Religion 3
CIS 280 Object-Oriented Programming in C++ 3
and CIS 182 JAVA Programming 3.5
MATH 170 Analytic Geometry and Calculus 4
and MATH 112 Elementary Statistics 4
or PSYC 210 Elementary Statistics (4)

University of California – Los Angeles

UCLA offers a B.A. and a B.S. in Anthropology Bachelors of Arts

ANTH 115 Physical Anthropology 3
ANTH 120 Introduction to Archaeology 3
### Bachelors of Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 115</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 120</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 202</td>
<td>Molecular Biology/Genetics</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>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 212</td>
<td>Elementary Statistics</td>
<td>4</td>
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</tbody>
</table>

University of California – Riverside

Bachelors of Arts and Bachelors of Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>ANTH 115</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 120</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 106</td>
<td>Introduction to Language Study</td>
<td>3</td>
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</tbody>
</table>

### Anthropology/Law and Society

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 115</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 120</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 106</td>
<td>Introduction to Language Study</td>
<td>3</td>
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<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
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<tr>
<td>PSYC 220</td>
<td>Research Methods</td>
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ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
<td>3</td>
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<tr>
<td>ANTH 115</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 120</td>
<td>Introduction to Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 170</td>
<td>Introduction to Language and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

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

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

### ARCHITECTURAL TECHNOLOGY

#### CAREER OPPORTUNITIES:
- Architectural Draftsperson
- Architectural CAD Drafter

ASSOCIATE IN ARTS DEGREE MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 110</td>
<td>Introduction to Architecture and Environmental Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 111</td>
<td>Architectural Drafting and Design I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 112</td>
<td>History of Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 113</td>
<td>Building Codes</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 121</td>
<td>Architectural Drafting and Design II</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ARCH 123</td>
<td>Introduction to Computer Aided Drafting for Architecture</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 212</td>
<td>Architectural Design Theory I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 213</td>
<td>Advanced Applications of Computer Aided Drafting for Architecture</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 221</td>
<td>AutoCAD Architecture</td>
<td>4</td>
</tr>
<tr>
<td>ART 110</td>
<td>Freehand Drawing</td>
<td>3</td>
</tr>
</tbody>
</table>

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.

### TRANSFER MAJOR REQUIREMENTS

#### COMMON LOWER DIVISION (CORE) REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 111</td>
<td>Architectural Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ENGL 103</td>
<td>Critical and Argumentative Writing</td>
</tr>
<tr>
<td>MATH 140</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
</tbody>
</table>

### ADDITIONAL LOWER DIVISION REQUIREMENTS 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>ARCH 121</td>
<td>Materials and Methods of Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>Architectural Delineation</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 211</td>
<td>Architectural Design, Programming and Presentation</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 212</td>
<td>Architectural Design Theory I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 222</td>
<td>Architectural Design Theory II</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

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 Major Requirements (e.g.) by end of Fall – 09 for entrance in Fall – 10.

**California State Polytechnic University – San Luis Obispo**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 110</td>
<td>Introduction to Architecture and Environmental Design</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>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>PHYS 201</td>
<td>Engineering Physics</td>
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</tbody>
</table>

**University of California – Berkeley**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 110</td>
<td>Introduction to Architecture and Environmental Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 112</td>
<td>History of Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>Architectural Delineation</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 212</td>
<td>Architectural Design Theory I</td>
<td>3</td>
</tr>
</tbody>
</table>
ART 110  Freehand Drawing 3
ART 121  Three-Dimensional Design 3
MATH 170  Analytic Geometry and Calculus I 4
MATH 190  Analytic Geometry and Calculus II 4
PHYS 201  Engineering Physics 4

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
ARTH 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
SPCH 130  Fundamentals of Speaking (3)
ART 103  Art History III: Neoclassical to Present 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.


ART AND DESIGN

CAREER OPPORTUNITIES:
Advertising*  Gallery Director/Assistant
Antique Dealer  Layout Artist
Architect*  Museum Docent*
Art Therapist*  Painter/Sculptor
Cartoonist  Police Artist
Ceramist/Ceramics Lab Tech  Product Designer*
Curator*  Teacher/Professor*
Computer Game Designer*  Technical Illustrator
Designer (floral, graphics, interior)*  Textile/Garment Designer*

*Bachelor's degree normally required

ASSOCIATE IN ARTS DEGREE

REQUIRED FOUNDATIONAL COURSES (15 UNITS)  UNITS
ART 102  Art History II: Renaissance to Rococo 3
or ART 103  Art History III: Neoclassical to Present (3)
ART 110  Freehand Drawing 3
ART 112  Life Drawing 3
ART 120  Two-Dimensional Design 3
ART 121  Three-Dimensional Design 3

ART AND DESIGN OPTIONAL TRACKS (CHOOSE ONE)
CERAMICS — REQUIRED (6 UNITS)
ART 150  Introduction to Ceramics 3
ART 151  Ceramics – Wheelthrowing 3

JEWELRY — REQUIRED (12 UNITS)
ART 144  Jewelry/Metalsmithing 3
ART 145  Jewelry Casting and Molds 3
ART 246  Jewelry Design Fabrication 3

DRAWING AND PAINTING — REQUIRED (9 UNITS)
ART 130A  Fundamentals of Painting 3
ART 130B  Fundamentals of Painting 3
ART 136  Painting for Art Majors 3

PRINTMAKING — REQUIRED (9 UNITS)
ART 116  Beginning Printmaking 3
ART 117  Intermediate Printmaking 3
ART 218  Screenprinting 3
or ART 219  Advanced Etching (3)

SCULPTURE — REQUIRED (11 UNITS)
ART 160  Life Sculpture 2
ART 162  Introduction to Sculpture 3
ART 163  The Techniques of Sculpture 3
ART 264  Sculpture-Stonecarving 3

GRAPHIC DESIGN — REQUIRED (18 UNITS)
ART 182A  Lettering and Typography 3
ART 184  Graphic Design I 3
ART 186  Computer Graphics with Adobe Illustrator 3
ART 188  Design for Desktop Publishing 3
ART 192  Photoshop/Digital Imaging 3
ART 196  Web Design with Flash & Dreamweaver 3

RECOMMENDED ELECTIVES
CERAMICS
ART 252  Ceramics – Form and Technique 3
ART 253  Ceramics – Form and Content 3

DRAWING AND PAINTING
ART 213  Intermediate Life Drawing 3
ART 237  Life Painting 3
ART 238  Special Studies in Painting 3

GRAPHIC DESIGN
ART 180  Calligraphy I 3
ART 181  Calligraphy II 3
ART 182B  Lettering and Typography II 3
ART 185  Rendering I 3
ART 285  Rendering II 3
BA 110  Advertising 3
PHOTO 100  Introductory Photography 3
MULTIMEDIA DESIGN
PHOTO 100  Introductory Photography  3
PHOTO 102  Intermediate Photography  3
PHOTO 112  Intermediate Digital Photography  3
ART 184  Graphic Design I  3
CIS 103  Computer Programming Logic  3.5
CIS 205  Programming in HTML for the World Wide Web  1.5

PRINTMAKING
ART 218  Screenprinting  3
ART 219  Advanced Etching  3

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

DIGITAL ARTS
ASSOCIATE IN ARTS DEGREE

REQUIRED COURSES

CORE REQUIREMENTS (21 UNITS)
ART 101  Art History I: Prehistory to Gothic  3
or ART 103  Art History III: Neoclassical to Present  3
ART 110  Freehand Drawing  3
ART 112  Life Drawing  3
ART 114  Storyboard and Graphic Novel Illustration  3
ART 120  Two-Dimensional Design  3
ART 121  Three-Dimensional Design  3
ART 190  Animation Principles  3

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

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

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

Plus two courses from the following list (6 units):
TH 156  Video Production  3
ART 192  Photoshop/Digital Imaging  3
ART 194  Multimedia Design  3
ART 196  Web Design with Flash and Dreamweaver  3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete (1) core requirements, (2) all courses in the Motion Graphics Emphasis or the Computer Animation Emphasis, (3) two courses from the list above, and (4) the Associate in Arts Degree general education requirements.

ART AND DESIGN

TRANSFER MAJOR REQUIREMENTS

LOWER DIVISION REQUIREMENTS

FOR SPECIFIC TRANSFER INSTITUTIONS

UNITS

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.


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 107  Asian Art History  3
ART 110  Freehand Drawing  3
ART 112*  Life Drawing  3
ART 120  Two-Dimensional Design  3
ART 121  Three-Dimensional Design  3
ART 103A+  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, and Industrial design (note: major requirements are different then 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

**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

or **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)

**ART 130A** Fundamentals of Painting 3

or **ART 130B** Fundamentals of Painting (3)

or **ART 136** Painting for Art Majors (3)

**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 100** Introduction to World Art (3)

**ART 101** Art History I: Prehistory to Gothic 3

**ART 102** Art History II: Renaissance to Rococo (3)

**ART 107** Asian Art History 3

NOTE: supplemental application, statement of interest and goals (in addition to the general UC Application Personal Statement), and portfolio (of 8-10 images) are required for admissions. Portfolio must be submitted in digital (CD-R) format.

**University of California – Riverside**

**ART 107** Asian Art History 3

**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.

**COMPUTER ANIMATION**

**CERTIFICATE OF ACHIEVEMENT**

**REQUIRED COURSES**

**ART 101** Art History I: Prehistory to Gothic 3

or **ART 103** Art History III: Neoclassical to Present (3)

**ART 110** Freehand Drawing 3

**ART 112** Life Drawing 3

**ART 114** Storyboard and Graphic Novel Illustration 3

**ART 120** Two-Dimensional Design 3

**ART 121** Three-Dimensional Design 3

**ART 190** Animation Principles 3

**ART 191** 3D Character Animation 3

**ART 195** 3D Computer Modeling 3

**ENGL 240** Creative Writing 3

**MUS 244** Digital Audio Production 3

TOTAL CERTIFICATE REQUIREMENTS: 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 selected from the following courses: ART 192, ART 194, ART 196, TH 156 and general education requirements to achieve a minimum of 60 units.

**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.

**SELECT 11-12 UNITS FROM THE FOLLOWING:**

**ART 186** Computer Graphics with Adobe Illustrator 3

**ART 188** Design for Desktop Publishing 3
### Curriculum and Requirements for Majors, Certificates and Transfer Programs

### Digital Graphics Foundation

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 186</td>
<td>3</td>
</tr>
<tr>
<td>ART 192</td>
<td>3</td>
</tr>
</tbody>
</table>

**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.

### Digital Layout Foundation

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 186</td>
<td>3</td>
</tr>
<tr>
<td>ART 188</td>
<td>3</td>
</tr>
</tbody>
</table>

**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.

### Lettering Arts

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 180</td>
<td>3</td>
</tr>
<tr>
<td>ART 181</td>
<td>3</td>
</tr>
<tr>
<td>ART 287A</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Verification of Completion Requirements** 12

**Note:** 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.

### Motion Graphics

**Certificate of Achievement**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>3</td>
</tr>
<tr>
<td>or ART 103</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 110</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>3</td>
</tr>
<tr>
<td>ART 114</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>3</td>
</tr>
<tr>
<td>ART 121</td>
<td>3</td>
</tr>
<tr>
<td>ART 182A</td>
<td>3</td>
</tr>
<tr>
<td>ART 182B</td>
<td>3</td>
</tr>
<tr>
<td>ART 190</td>
<td>3</td>
</tr>
<tr>
<td>ART 198</td>
<td>3</td>
</tr>
<tr>
<td>MUS 244</td>
<td>3</td>
</tr>
</tbody>
</table>

**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 selected from the following courses: ART 192, ART 194, ART 196, TH 156 and general education requirements to achieve a minimum of 60 units.

### 3D Animation Foundation

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 195</td>
<td>3</td>
</tr>
<tr>
<td>ART 191A</td>
<td>3</td>
</tr>
</tbody>
</table>

**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 develop fundamental 3D Computer modeling skills b) to explore traditional animation principles and apply them to digital animation c) to create original 3D models with Photographic texture maps d) to create animated short
films e) to help the participant update software skills. A Verification of Completion in the 3D Animation Foundation will be granted by the division upon completion of 6 units.

**AUTOMOTIVE COLLISION REPAIR**

**CAREER OPPORTUNITIES:**
Automotive Collision Repair Technician  
Body and Frame Repair Technician  
Assistant Body and Frame Repair Technician  
Shop Foreman

**AUTOBODY TECHNICIAN**

**CERTIFICATE OF ACHIEVEMENT**

<table>
<thead>
<tr>
<th>UNIT</th>
<th>Course Description</th>
<th>UNITS</th>
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</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>Steering, Suspension, and Power Train</td>
<td>4.5</td>
</tr>
<tr>
<td>AB 54</td>
<td>Advanced-Design 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

**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 58L, AB 59M, AB 59B, AB 62, AB 63, AB 65, AB 66, AB 68, 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 188, AB 281, AB 282, AB 283, AB 285, AB 287, AB 288.

**AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY**

**CAREER OPPORTUNITIES:**
General Auto Mechanic  
Parts Clerk  
Mechanical and Auto Agencies or Commercial Fleets

**CERTIFICATES OF ACHIEVEMENT**

**ELECTRICAL/DIAGNOSIS TECHNICIAN**

<table>
<thead>
<tr>
<th>UNIT</th>
<th>Course Description</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Automotive Maintenance and Operation</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 110</td>
<td>Automotive Engines</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 160</td>
<td>Automotive Electricity</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 170</td>
<td>Automotive 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>Systems – 1997 Standards</td>
<td>5</td>
</tr>
</tbody>
</table>

**ENGINE/MACHINING TECHNOLOGY**

<table>
<thead>
<tr>
<th>UNIT</th>
<th>Course Description</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 100</td>
<td>Automotive Maintenance and Operation</td>
<td>4</td>
</tr>
<tr>
<td>AUTO 110</td>
<td>Automotive 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>High Performance Engines</td>
<td>5</td>
</tr>
<tr>
<td>AUTO 212</td>
<td>Automotive Specialty</td>
<td>2</td>
</tr>
</tbody>
</table>

**MANUFACTURE SPECIALTY**

<table>
<thead>
<tr>
<th>UNIT</th>
<th>Course Description</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 73</td>
<td>Automotive Mechanical Repair Occupational Work Experience</td>
<td>15</td>
</tr>
<tr>
<td>AUTO 111</td>
<td>Automotive 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>Automotive Alignment, Brake and Suspension</td>
<td>6</td>
</tr>
<tr>
<td>AUTO 161</td>
<td>Automotive Electricity</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>

**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 TM 50 and 3) electives as needed.

**RECOMMENDED ELECTIVES:** WELD 100, MTT 100, BCOM 147, BCOM 148, MFGT 100, TM 50.

**INSTALLER**

**VERIFICATION OF COMPLETION**

<table>
<thead>
<tr>
<th>UNIT</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>AUTO 1</td>
<td>Engine Maintenance</td>
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<tr>
<td>AUTO 2</td>
<td>Fuel Systems</td>
<td>0.5</td>
</tr>
<tr>
<td>AUTO 3</td>
<td>Lubrication and Cooling</td>
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<tr>
<td>AUTO 4</td>
<td>Electrical Systems</td>
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</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>

**TOTAL** 3.5
BIOLOGY

CAREER OPPORTUNITIES:
Secondary Level Teacher  Science Writer
Laboratory Technologist  Park Ranger
Ecologist with Government Agency  Health Professions
Genetic Counselor  Veterinarian

TRANSFER MAJOR REQUIREMENTS
COMMON LOWER DIVISION MAJOR PREPARATION FOR CALIFORNIA STATE UNIVERSITY

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 Polytechnic University – Pomona
CHEM 211 Organic Chemistry  5
CHEM 212 Organic Chemistry  5
MATH 112 Elementary Statistics  4
or PSYC 210 Elementary Statistics  4
MATH 116 Calculus for Managerial, Biological, and Social Sciences  4
MICRO 200 Principles & Applications of Microbiology  5
ENGL 100 Freshman Composition  4
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 Psychology  3
See counselor for other options.

California State University – Dominguez Hills
MATH 112 Elementary Statistics  4
or MATH 116* Calculus for Managerial, Biological, and Social Sciences  4
(*Required for B.S. degree only)

NOTE: PHYS 201 & PHYS 202 & PHYS 203 may substitute for PHYS 101 & PHYS 102 for the B.S. option.

California State University – Fullerton
There are four concentrations within the Biological Science Major:
BIOL 202 Molecular Biology/Genetics  4
CHEM 211 Organic Chemistry  5
CHEM 212 Organic Chemistry  5
MATH 116 Calculus for Managerial, Biological, and Social Sciences  4
or MATH 170 Analytic Geometry and Calculus I  4
*After Math 116 an additional math class must be completed at CSULB after transfer.

NOTE: PHYS 201 & PHYS 202 may substitute for PHYS 101 & PHYS 102 for any of the Biology Options offered at CSULB.

California State University – Long Beach

GENERAL OPTION
MATH 116* Calculus for Managerial, Biological, and Social Sciences  4
or MATH 170 Analytic Geometry and Calculus I  4
and MATH 190 Analytic Geometry and Calculus II  4

OPTION IN BIOLOGY EDUCATION
ASTR 101 Elementary Astronomy  3
BIOL 115 Marine Biology  3
GEOL 101 The Earth Environment  4
or ESCI 110 Introduction to Earth Science  4
MATH 116 Calculus for Managerial, Biological, and Social Sciences  4
or MATH 170 Analytic Geometry and Calculus I  4
MICR 200 Principles & Application of Microbiology  5

OPTION IN BOTANY
MATH 116* Calculus for Managerial, Biological, and Social Sciences  4
or MATH 170 Analytic Geometry and Calculus I  4
and MATH 190 Analytic Geometry and Calculus II  4

OPTION IN CELL & MOLECULAR BIOLOGY
MICR 200 Principles & Application of Microbiology  5
MATH 116* Calculus for Managerial, Biological, and Social Sciences  4
or MATH 170 Analytic Geometry and Calculus I  4
and MATH 190 Analytic Geometry and Calculus II  4

OPTION IN ECOLOGY
GEOL 101 The Earth Environment  4
or ESCI 110 Introduction to Earth Science  4
MATH 116* Calculus for Managerial, Biological, and Social Sciences  4
or MATH 170 Analytic Geometry and Calculus I  4
and MATH 190 Analytic Geometry and Calculus II  4

OPTION IN PHYSIOLOGY
MATH 116* Calculus for Managerial, Biological, and Social Sciences  4
or MATH 170 Analytic Geometry and Calculus I  4
and MATH 190 Analytic Geometry and Calculus II  4

OPTION IN ZOOLOGY
GEOL 101 The Earth Environment  4
or ESCI 110 Introduction to Earth Science  4
or MICR 200 Principles & Applications of Microbiology  5
MATH 116* Calculus for Managerial, Biological, and Social Sciences  4
or MATH 170 Analytic Geometry and Calculus I  4
and MATH 190 Analytic Geometry and Calculus II  4

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

NOTE: PHYS 201 & PHYS 202 may substitute for PHYS 101 & PHYS 102 for any of the Biology Options offered at CSULB.
California State University – Los Angeles

CHeM 205 Quantitative Analysis Chemistry 4
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4
MATH 170 Analytic Geometry and Calculus I 4

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

COMMON LOWER DIVISION MAJOR PREPARATION FOR UNIVERSITY OF CALIFORNIA

BIOL 200 Principles of Biology 5
BIOL 201 Principles of Biology 5
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5
CHEM 211 Organic Chemistry 5
CHEM 212 Organic Chemistry 5
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

University of California – Irvine

BIOL 202 Molecular Biology/Genetics 4
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
or MATH 112 Elementary Statistics 4
or PSYC 210 Elementary Statistics 4
PHYS 203* Engineering Physics 4
*(PHYS 203 may substitute for PHYS 202)

University of California – Los Angeles

BIOL 202 Molecular Biology/Genetics 4
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 203 Engineering Physics 4

University of California – Riverside

BOT 120 Introduction to Plant Science 4
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
PHYS 203 Engineering Physics 4
ZOOL 120 Introduction to Animal Biology 4

The IGETC is not accepted for majors housed in the College of Natural and Agricultural Sciences. Transfer students are encouraged to follow the College of Natural and Agricultural Sciences breadth Major Requirements as outlined on www.assist.org.

UCR offers a Biology B.A., Biology B.S. and a Biological Sciences B.S. Students pursuing a B.A. degree in Biology will also need to complete the equivalent of 4th quarter proficiency (generally 3rd semester) in a language other than English, as part of the breadth requirements for this degree. The Biological Sciences major differs from the Biology Major in the structure of the upper division course work. In the Biological Sciences major, students choose one of nine upper division tracks of specialized coursework. Those tracks are: Bioinformatics and Genomics; Biology; Cell, Molecular and Developmental Biology; Conservation Biology; Environmental Toxicology; Evolution and Ecology; Medical Biology; Microbiology; and Plant Biology.

For the Bioinformatics and Genomics Track, also complete CIS 180, CIS 280, and CIS 292.

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.

BOTANY

CAREER OPPORTUNITIES:

Secondary Teaching
Applied work with Federal and State Parks
Plant Breeder
Nursery Manager
Plant Ecologist
Plant Pathologist

TRANSFER MAJOR REQUIREMENTS

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

BIOL 200 Principles of Biology 5
BIOL 201 Principles of Biology 5
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Long Beach

(Option within the Biology Major)

MATH 116* Calculus for Managerial, Biological and Social Sciences 4
or MATH 170 Analytical Geometry and Calculus I 4
and MATH 190 Analytical Geometry and Calculus II 4
and PHYS 101 General Physics 4
and PHYS 102 General Physics 4
or PHYS 201 Engineering Physics 4
and PHYS 202 Engineering Physics 4

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

California State Polytechnic University – Pomona

CHEM 211 Organic Chemistry 5
CHEM 212 Organic Chemistry 5
ENGL 100 Freshman Composition 4
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  
or PSYC 210 Elementary Statistics (4)  
MATH 116 Calculus for Managerial, Biological and Social Science 4  
PHYS 101 General Physics 4  
PHYS 102 General Physics 4  

University of California – Riverside (Plant Biology B.A. or B.S.)  
BOT 120 Introduction to Plant Science 4  
CHEM 211 Organic Chemistry 5  
CHEM 212 Organic Chemistry 5  
MATH 170 Analytical Geometry and Calculus I 4  
MATH 190 Analytical Geometry and Calculus II 4  
PHYS 201 Engineering Physics 4  
PHYS 202 Engineering Physics 4  
PHYS 203 Engineering Physics 4  
ZOOL 120 Introduction to Animal Biology 4  

Students working towards the B.A. degree are encouraged to complete the foreign language breadth requirement prior to transfer. This requirement is 3rd semester proficiency in one foreign language.  
The IGETC is not accepted for majors housed in the College of Natural and Agricultural Sciences.  
Transfer students are encouraged to follow the College of Natural and Agricultural Sciences breadth Major Requirements as outlined on www.assist.org  

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.  

BUSINESS ADMINISTRATION  

CAREER OPPORTUNITIES:  
Certified Public Accountant  
Business  
Industry  
Government  
Self-Employment  

TRANSFER PROGRAM  
LOWER DIVISION MAJOR REQUIREMENTS FOR SPECIFIC TRANSFER INSTITUTIONS  

California State University - Dominguez Hills  
LAW 111 Business Law 3  
or BA 113 Legal Environment of Business (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.  
See Counselor for additional courses required for specific concentrations.  

California State University - Fullerton  
BA 113 Legal Environment of Business 3  
ACCT 100 Introduction to Accounting 3  
ACCT 101 Fundamentals of Accounting I 4  
ACCT 102 Fundamentals of Accounting II 4  
ACCT 133 Spreadsheet Accounting I 3  
CIS 101 Introduction to Computer Information Systems 3  
ECON 201 Principles of Microeconomics 3  
ECON 202 Principles of Microeconomics 3  
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4  
or MATH 170 Analytical Geometry and Calculus I (4)  

Students are advised to complete ENGL 103 as their critical thinking requirement.  
This will meet a prerequisite for a graduation requirement at CSULA.  

California State University - Los Angeles  
LAW 111 Business Law 3  
or BA 113 Legal Environment of Business (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  
MATH 112 Elementary Statistics 4  
or MATH 115 Finite Mathematics 4  
or PSYC 210 Elementary Statistics 4  
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4  

ECON 201 and math courses 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 University - Long Beach  
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 Microeconomics 3  
ECON 202 Principles of Microeconomics 3  
MATH 112 Elementary Statistics 4  
or MATH 115* Finite Mathematics 4  
or PSYC 210 Elementary Statistics 4  
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4  

Students are advised to complete ENGL 103 as their critical thinking requirement.  
This will meet a prerequisite for a graduation requirement at CSULA.
The Business Administration and the Mathematics departments have determined that Statistics is better preparation than Finite Math for upper division course work.

Every Business Administration major at CSULB must take either PHIL 106 (Logic) or PHIL 102 (Ethics). If you plan to specialize in MIS, you must take PHIL 106. If you plan on specializing in Accounting you must take PHIL 102. Specialists in Accounting must take a course in Anthropology, Psychology, or Sociology.

International Business majors need four semesters of a foreign language.

California State Polytechnic University – Pomona

LAW 111 Business Law 3
or BA 113 Legal Environment of Business (3)
ACCT 100 Introduction to Accounting 3
ACCT 101 Fundamentals of Accounting I 4
ACCT 102 Fundamentals of Accounting II 4
CIS 102 Introduction to Microcomputer Hardware and Application Software 3
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 112 Elementary Statistics 4
or PSYC 210 Elementary Statistics (4)

Majors in Accounting must take either ENGL 102 or 103. Majors in Finance, Real Estate and Law must take MATH 116 and either ENGLISH 102 or 103. Other subplans may have additional courses required. Please see www.assist.org for listings.

University of Southern California

ACCT 100 Introduction to Accounting 3
ACCT 101 Fundamentals of Accounting I 4
ACCT 102 Fundamentals of Accounting II 4
ECON 201 Principles of Microeconomics 3
ECON 202 Principles of Microeconomics 3
ENGL 100 Freshman Composition 3
ENGL 101 Critical Thinking Through Literature 3
or ENGL 102 Freshman Composition and Literature 3
or ENGL 103 Critical and Argumentative Writing (3)
or PHIL 103 Philosophical Reasoning: Critical Thinking in Philosophy (3)
MATH 116 Calculus for Managerial, Biological, and Social Sciences 4
or MATH 170 Analytical Geometry and Calculus I (4)

University of California – Irvine

This major will begin accepting junior level applicants for Fall 2010. Minimum accumulative GPA of 3.0 is required. Completion of lower division prep courses below and highest grades overall will be given preference for admission. Admission will be competitive due to limited space availability.

ACCT 100 Introduction to Accounting 3
ACCT 101 Fundamentals of Accounting I 4
ACCT 102 Fundamentals of Accounting II 4
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 112 Elementary Statistics 4
or PSYC 210 Elementary Statistics (4)
MATH 170 Analytical Geometry and Calculus I 4
MATH 190 Analytical Geometry and Calculus II 4

University of California – Riverside

BA 100 Fundamentals of Business 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
or CIS 102 Introduction to Microcomputer Hardware and Applications Software (3)
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 112 Elementary Statistics 4
MATH 116 Calculus for Managerial, Biological and Social Sciences 4
or MATH 170 Analytical Geometry and Calculus I (4)

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the following common lower division requirements: ACCT 100, ACCT 101, LAW 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.

BUSINESS ADMINISTRATION

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
</tr>
<tr>
<td>LAW 111</td>
<td>Business Law</td>
</tr>
<tr>
<td>or BA 113</td>
<td>Legal Environment of Business (3)</td>
</tr>
<tr>
<td>BA 114</td>
<td>Marketing</td>
</tr>
<tr>
<td>or ECON 201</td>
<td>Principles of Macroeconomics (3)</td>
</tr>
<tr>
<td>BA 115</td>
<td>Management Business</td>
</tr>
<tr>
<td>BA 120</td>
<td>Management – Accounting and Internal Control 3</td>
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<tr>
<td>or ACCT 100</td>
<td>Introduction to Accounting (3)</td>
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<tr>
<td>BA 132</td>
<td>Computer Applications for Managers</td>
</tr>
<tr>
<td>or CIS 101</td>
<td>Introduction to Computer Information Systems (3)</td>
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</tbody>
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TOTAL CERTIFICATE REQUIREMENTS: 18

RECOMMENDED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BA 101</td>
<td>International Business</td>
</tr>
<tr>
<td>BA 104</td>
<td>Managing Cultural Diversity</td>
</tr>
<tr>
<td>BA 106</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>BA 107</td>
<td>Human Relations in Business</td>
</tr>
<tr>
<td>BA 156</td>
<td>Motivational Presentation Skills for Management 3</td>
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<tr>
<td>BA 157</td>
<td>Principles of Public Relations 3</td>
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<td>or JOUR 157</td>
<td>Principles of Public Relations (3)</td>
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<tr>
<td>BA 171-174</td>
<td>Business Administration Occupational Work Experience 1-4</td>
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<tr>
<td>BA 204</td>
<td>Project Management</td>
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<tr>
<td>BA 205</td>
<td>Organizational Leadership</td>
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<tr>
<td>LAW 101</td>
<td>Introduction to Law</td>
</tr>
<tr>
<td>RE 101</td>
<td>Real Estate Principles</td>
</tr>
</tbody>
</table>

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Plan A (Degree and/or Career Option): Meet the requirements for a Certificate of Achievement in Business Administration (18 units). Take 12 units of the Recommended Courses. Complete 18 units of identified general education courses (see Plan A Degree and/or Career Option), proficiency requirements and electives, if necessary, to total a minimum of 60 degree applicable units.
Plan B (CSU General Education Requirements): Meet the requirements for a Certificate of Achievement in Business Administration (18 units). Complete a minimum of 39 units of identified CSU general education courses (see Plan B CSU General Education Requirements), the health and wellness proficiency requirement, and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institutions as listed.

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.

**BUSINESS MANAGEMENT**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
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<tr>
<td>BA 101</td>
<td>International Business</td>
<td>3</td>
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<tr>
<td><strong>or</strong> BA 117</td>
<td>Fundamentals of Supervision</td>
<td>(3)</td>
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<tr>
<td><strong>or</strong> BA 153</td>
<td>Small Business Management</td>
<td>(3)</td>
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<td>BA 107</td>
<td>Human Relations in Business</td>
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<td>BA 113</td>
<td>Legal Environment of Business</td>
<td>3</td>
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<tr>
<td><strong>or</strong> LAW 111</td>
<td>Business Law</td>
<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 132</td>
<td>Computer Applications for Managers</td>
<td>3</td>
</tr>
<tr>
<td><strong>or</strong> BA 156</td>
<td>Motivational Presentation Skills for</td>
<td>(3)</td>
</tr>
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<td>Managers</td>
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**TOTAL CERTIFICATE REQUIREMENTS:** 18

**RECOMMENDED COURSES**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BA 104</td>
<td>Managing Cultural Diversity</td>
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<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><strong>or</strong> 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>
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<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>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>BA 65</td>
<td>NMA Role of the Supervisor</td>
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<tr>
<td>BA 66</td>
<td>NMA Management Principles</td>
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<tr>
<td>BA 67</td>
<td>NMA Communication Skills</td>
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</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>
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<tr>
<td>BA 76</td>
<td>NMA Coaching and Counseling</td>
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<tr>
<td>BA 77</td>
<td>NMA Leadership Development</td>
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</tr>
<tr>
<td>BA 78</td>
<td>NMA Business Concepts</td>
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</tr>
<tr>
<td>BA 79</td>
<td>NMA Law for the Supervisor</td>
<td>1</td>
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</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.

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

**BUSINESS MARKETING**

**CERTIFICATE OF ACHIEVEMENT**

**DIVISION/DEPARTMENT REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>International Business</td>
<td>3</td>
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<tr>
<td>BA 107</td>
<td>Human Relations in Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>BA 114</td>
<td>Marketing</td>
<td>3</td>
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<tr>
<td>BA 121</td>
<td>Sales</td>
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</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><strong>or</strong> 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>
<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>
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</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>
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</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>
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<tr>
<td>BA 67</td>
<td>NMA Communication Skills</td>
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<tr>
<td>BA 68</td>
<td>NMA Interpersonal Relationship Skills</td>
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<tr>
<td>BA 69</td>
<td>NMA Developing Performance</td>
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</tr>
<tr>
<td>BA 75</td>
<td>NMA New Employee</td>
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</table>
ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Plan A (Degree and/or Career Option): Meet the requirements for a Certificate of Achievement in Business Marketing (18 units). Take 12 units of the recommended Courses. Complete 18 units of identified general education courses (see Plan A Degree and/or Career Option), proficiency requirements and electives, if necessary, to total a minimum of 60 degree applicable units.

Plan B (CSU General Education Requirements): Meet the requirements for a Certificate of Achievement in Business Marketing (18 units). Complete a minimum of 39 units of identified CSU general education courses (see Plan B CSU General Education Requirements), the health and wellness proficiency requirement, and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institutions as listed.

Plan C (Interssegmental General Education Transfer Curriculum – iGETC – For Transfer to UC and CSU): Meet the requirements for a Certificate of Achievement in Business Marketing (18 units). Complete a minimum of 35 (UC) or 38 (CSU) units of identified general education courses (see Plan C – iGETC General Education Requirements), the health and wellness proficiency requirement, and elective courses, if necessary, for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institutions as listed.

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

HUMAN RESOURCES MANAGEMENT

CERTIFICATE OF ACHIEVEMENT

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 REQUIREMENTS: 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.

INTERNATIONAL BUSINESS

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS: UNITS
BA 52 Fundamentals of Importing and Exporting 3
or BA 155 Introduction to Global Logistics 3
BA 101 International Business 3
BA 102 International Business Law 3
or BA 113 Legal Environment of Business 3
BA 104 Managing Cultural Diversity 3
or BA 107 Human Relations in Business 3
BA 114 Marketing 3
BA 120 Management – Accounting and Internal Control 3
or ACCT 100 Introduction to Accounting 3
ECON 101 U.S. & Global Economy 3
or ECON 201 Principles of Macroeconomics 3

TOTAL CERTIFICATE REQUIREMENTS: 21

RECOMMENDED COURSES:

ANTH 100 Cultural Anthropology 3
BA 106 Human Resource Management 3
LAW 111 Business Law 3
BA 132 Computer Applications for Managers 3
BA 156 Motivational Presentation Skills for Managers 3
BA 171-174 Business Administration Occupational Work Experience 3
BA 204 Project Management 3
BA 205 Organizational Leadership 3
BCOM 150 International Business Communication 3
or BA 157 Principles of Public Relations 3
or JOUR 157 Principles of Public Relations 3
LAW 101 Introduction to Law 3
LAW 111 Business Law 3
GEOG 105 World Regional Geography 3
PHIL 200 World Religions 3
POL 210 International Relations 3

A Foreign Language is recommended.

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

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS:</th>
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<tbody>
<tr>
<td>BA 50  Business Math (or equivalent)</td>
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</tr>
<tr>
<td>BA 106  Human Resource Management</td>
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<tr>
<td>BA 107  Human Relations in Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 114  Marketing</td>
<td>3</td>
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<tr>
<td>BA 115  Management-Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 120  Management-Accounting and Internal Control</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 100  Introduction to Accounting</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 123  Management – Retailing</td>
<td>3</td>
</tr>
<tr>
<td>or BA 117  Fundamentals of Supervision</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 132  Computer Applications for Managers</td>
<td>3</td>
</tr>
<tr>
<td>or BCOT 114  Introduction to Microsoft Office</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 156  Motivational Presentation Skills for Managers</td>
<td>3</td>
</tr>
<tr>
<td>or BCOM 148  Effective Business Presentations</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 157  Principles of Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>or JOUR 157  Principles of Public Relations</td>
<td>(3)</td>
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<tr>
<td>or BCOM 147  Business Communications</td>
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**TOTAL CERTIFICATE REQUIREMENTS:** 30

### RECOMMENDED COURSES:

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>BA 104</td>
<td>Managing Cultural Diversity</td>
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</tr>
<tr>
<td>BA 110</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 113</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 153</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 204</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 205</td>
<td>Organizational Leadership</td>
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<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>
<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:

Plan A (Degree and/or Career Option): Meet the requirements for a Certificate or Achievement in Retail Management (30 units). Take 12 units of the Recommended Courses. Complete 18 units of identified general education courses (see Plan A Degree and/or Career Option), proficiency requirements and electives, if necessary to total a minimum of 60 degree applicable units.

Plan B (CSU General Education Requirement): Meet the requirements for the Certificate of Achievement in Retail Management (30 units). Complete a minimum of 39 units of identified CSU general education courses (see Plan B CSU General Education Requirements), the health and wellness proficiency requirements and elective courses, if necessary for a minimum of 60 degree applicable units. Please check lower division major requirements for specified transfer institution as listed.

Plan C (Interssegmental General Education Transfer 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.

## SMALL BUSINESS MANAGEMENT/ENTREPRENEURSHIP

### CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 153  Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 114  Marketing</td>
<td>3</td>
</tr>
<tr>
<td>LAW 111  Business Law</td>
<td>3</td>
</tr>
<tr>
<td>or BA 113  Legal Environment of Business</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 117  Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BA 120  Management Accounting and Internal Control</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 100  Introduction to Accounting</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 132  Computer applications for Managers</td>
<td>3</td>
</tr>
<tr>
<td>or BCOT 114  Introduction to Microsoft Office</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 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>
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<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.

### BUSINESS ADMINISTRATION MINOR

#### VERIFICATION OF COMPLETION (9 UNITS)

Complete with a grade of Pass 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.
BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES

CAREER OPPORTUNITIES:
Business
Industry
Government
Self-Employment

GENERAL OFFICE

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS

UNITs
BCOM 46  Business Communications 3
BCOM 60  Customer Service/Telephne Techniques 1
BCOM 147  Business Communications 3
BCOM 152  Job Search in the Business Field 1.5
BCOT 63  Keyboarding Speed/Control Building 1
BCOT 112  Microsoft Word 3.5
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 3

TOTAL CERTIFICATE REQUIREMENTS: 24

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 a Business Counselor or the respective Department Chairperson for additional alternatives.

See Cerritos College Graduation Requirements.

LEGAL SECRETARY

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS

UNITs
BCOM 46  Business Communications 3
BCOM 60  Customer Service/Telephne Techniques 1
BCOM 147  Business Communications 3
BCOM 152  Job Search in the Business Field 1.5
BCOT 63  Keyboarding Speed/Control Building 1
BCOT 112  Microsoft Word 3.5
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 3

TOTAL CERTIFICATE REQUIREMENTS: 24.5/25.5

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
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.

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 1
BCOT 112  Microsoft Word 3.5
BCOT 131  Beginning College Keyboarding & Document Processing 3.5
BCOT 161  Principles of Filing 1
BCOT 162  Business Spelling and Proofreading Skills 3

TOTAL CERTIFICATE REQUIREMENTS: 19.5

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

NOTE: Although many of these courses are transferable, this Certificate/AA Degree is nontransferable. Please see a Business Counselor or the respective Department Chairperson for additional alternatives.
BUSINESS COMMUNICATIONS

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOM 46 Business Communications 3
BCOM 51 Business Oral Communication 1.5
BCOM 147 Business Communications 3
BCOM 148 Effective Business Presentations 3
BCOM 150 International Business Communication 3
BCOM 152 Job Search in the Business Field 1.5
BCOT 96 Microsoft PowerPoint 1.5

TOTAL VERIFICATION OF COMPLETION REQUIREMENTS: 16.5

OFFICE TECHNOLOGIES

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 3

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.

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

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: 17.5

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

DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOT 112 Microsoft Word 3.5
BCOT 113 Microsoft Excel 3.5
CIS 155 Microsoft Access 3
BCOT 96 Microsoft PowerPoint 1.5
BCOT 97 Microsoft Outlook 1.5

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.

PREPARATION FOR MICROSOFT CERTIFIED APPLICATION SPECIALIST (MCAS)

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS UNITS
BCOT 111 Microsoft Project for Office Professionals 1.5
BCOT 112 Microsoft Word 3.5
BCOT 113 Microsoft Excel 3.5
BCOT 118 Microsoft Access for Office Technology 1.5
BCOT 96 Microsoft PowerPoint 1.5
BCOT 97 Microsoft Outlook 1.5

TOTAL REQUIREMENTS: 13

RECOMMENDED ELECTIVES:

BCOT 95 Microsoft OneNote 1
BCOT 120 Integrated Business Office Projects 3.5
CIS 155 Microsoft Access 3
CIS 155B Microsoft Access Expert Level 1.5

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.
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.

OFFICE FILE CLERK

VERIFICATION OF COMPLETION

<table>
<thead>
<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>BCOM 152 Job Search in the Business Field</td>
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<tr>
<td>BCOT 131 Beginning College Keyboarding &amp; Document Processing</td>
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<tr>
<td>BCOT 161 Principles of Filing</td>
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<tr>
<td>BCOT 162 Business Spelling and Proofreading Skills</td>
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TOTAL REQUIREMENTS: 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.

RECEPTIONIST

VERIFICATION OF COMPLETION

<table>
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<tr>
<td>BCOT 161 Principles of Filing</td>
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TOTAL REQUIREMENTS: 3.5

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.

VIRTUAL BUSINESS OFFICE TECHNOLOGIES

VERIFICATION OF COMPLETION

<table>
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<tr>
<th>DIVISION/DEPARTMENT REQUIREMENTS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOT 62 Computer Keyboarding</td>
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<td>1.5</td>
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<td>BCOT 112 Microsoft Word</td>
<td>3.5</td>
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<td>BCOT 113 Microsoft Excel</td>
<td>3.5</td>
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<tr>
<td>BCOT 117 Desktop Publishing-Microsoft Publisher</td>
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<tr>
<td>BCOT 119 Business Virtual Office Technologies</td>
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<tr>
<td>BA 114 Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL REQUIREMENTS: 17

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.

CHEMISTRY

CAREER OPPORTUNITIES:
Teaching
Medicine
Pharmacy
Forensic Science
Industrial and Governmental Scientific Endeavors

TRANSFER PROGRAM

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

<table>
<thead>
<tr>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 General Chemistry</td>
</tr>
<tr>
<td>CHEM 112 General Chemistry</td>
</tr>
<tr>
<td>MATH 170 Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>MATH 190 Analytic Geometry and Calculus II</td>
</tr>
<tr>
<td>PHYS 201 Engineering Physics</td>
</tr>
<tr>
<td>PHYS 202 Engineering Physics</td>
</tr>
</tbody>
</table>

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.

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills*

<table>
<thead>
<tr>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205 Quantitative Analysis Chemistry</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
</tr>
<tr>
<td>PHYS 203 Engineering Physics</td>
</tr>
</tbody>
</table>

California State University – Fullerton*

<table>
<thead>
<tr>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
</tr>
<tr>
<td>MATH 240 Calculus and Differential Equations</td>
</tr>
<tr>
<td>PHYS 203 Engineering Physics</td>
</tr>
</tbody>
</table>

California State University – Long Beach*

<table>
<thead>
<tr>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 120 Introduction to Human Anatomy and Physiology</td>
</tr>
<tr>
<td>or A&amp;P 151 Introduction to Human Physiology</td>
</tr>
<tr>
<td>or A&amp;P 201 Human Physiology</td>
</tr>
<tr>
<td>or BIOL 200 Principles of Biology</td>
</tr>
<tr>
<td>and BIOL 201 Principles of Biology</td>
</tr>
<tr>
<td>CHEM 205 Quantitative Analysis Chemistry</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
</tr>
<tr>
<td>PHYS 203 Engineering Physics</td>
</tr>
</tbody>
</table>

California State University – Los Angeles*

<table>
<thead>
<tr>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205 Quantitative Analysis Chemistry</td>
</tr>
<tr>
<td>MATH 220 Analytic Geometry and Calculus III</td>
</tr>
<tr>
<td>MATH 240 Calculus and Differential Equations</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>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205 Quantitative Analysis Chemistry</td>
</tr>
<tr>
<td>CIS 180 Programming in C/C++</td>
</tr>
<tr>
<td>MATH 240 Calculus and Differential Equation</td>
</tr>
<tr>
<td>PHYS 203 Engineering Physics</td>
</tr>
</tbody>
</table>
### University of California – Irvine

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

### University of California – Los Angeles

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

### University of California – Riverside*

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</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>5</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 IGETC is not accepted for majors housed in the College of Natural and Agricultural Sciences.

Transfer students are encouraged to follow the College of Natural and Agricultural Sciences breadth Major Requirements as outlined on www.assist.org.

*The above listed requirements are for a Bachelor of Science Degree.

See counselor for Bachelor of Arts Degree requirements.

#### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complet 60 units to include (1) the above required courses and (2) Associate in Arts Degree general education requirements.

### CHICANO STUDIES

#### CAREER OPPORTUNITIES:
- Elementary or Secondary School Teacher
- School Counselor
- Resource Teacher
- Coordinator, Community, City, and State Agencies

#### TRANSFER MAJOR REQUIREMENTS
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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Long Beach</td>
<td>SPAN 245  Introduction to Chicano/Mexican American Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

Two years of college Spanish is also required.

### California State University – Dominguez Hills

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 245</td>
<td>Introduction to Chicano/Mexican American Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

See counselor regarding various concentration requirements.

### California State University – Los Angeles

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 245</td>
<td>Introduction to Chicano/Mexican American Culture</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 225</td>
<td>Mexican Literature in Translation</td>
<td>3</td>
</tr>
</tbody>
</table>

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

### University of California – Los Angeles

Cerritos College does not have any formally articulated courses with UCLA. However, formally articulated courses may be available at other community colleges. Students are advised to complete the equivalent of five quarters in Spanish.

### University of California – Riverside

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

There are also similar and related majors and Major Requirements at California State University, Fullerton, and University of California, Berkeley.

#### 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.

### CHILD DEVELOPMENT/EARLY CHILDHOOD

This program welcomes students from diverse cultural and ethnic backgrounds. Male students are encouraged to investigate career opportunities in Child Development.

The Child Development Department offers several different options for the student interested in working with young children. All full-time Child Development instructors are available to advise students in all of the following areas:

#### A. Child Development Department Specializations –
The specializations are designed to meet the minimum requirements of the Department of Social Services to teach in licensed private preschools and childcare programs. This is an entry-level career choice. The student is encouraged to pursue additional units in Child Development to advance in the field. Applications for the following Verifications of Completion must be made at the Health Occupations Division office anytime after the completion of courses:

- Associate Teacher Verification of Completion
- Preschool Director Verification of Completion
- Family Child Care Verification 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.

- 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: 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.

**DEPARTMENT SPECIALIZATIONS**

A1. **ASSOCIATE TEACHER SPECIALIZATION AND VERIFICATION 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 childcare program. The student must have taken the courses within the last five years and must have attained a grade of “C” or higher in each course. In addition, to qualify for this verification, the student must complete three out of four courses at Cerritos College.*

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>3</td>
</tr>
</tbody>
</table>

A2. **PRE-SCHOOL DIRECTOR SPECIALIZATION AND VERIFICATION OF COMPLETION: (15 UNITS)**

The following courses meet the minimum educational requirements under Title 22 (Department of Social Services) to qualify the student to be a director of a state licensed preschool or childcare program. The student must have 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 on Teacher Credentials.

**CORE COURSES**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>3</td>
</tr>
</tbody>
</table>

**ADDITIONAL COURSE**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEC 66</td>
<td>3</td>
</tr>
</tbody>
</table>

A3. **FAMILY CHILD CARE SPECIALIZATION AND VERIFICATION OF COMPLETION: (9 UNITS)**

To qualify for this verification, the student must complete the three courses at Cerritos College. The student must have taken the courses within the last five years and must have attained a grade of “C” or higher in each course.*

**COURSES**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 161</td>
<td>3</td>
</tr>
<tr>
<td>CDFC 10</td>
<td>3</td>
</tr>
</tbody>
</table>

*TO QUALIFY FOR CREDIT FOR VERIFICATION OF COMPLETION OR THE CERTIFICATE OF ACHIEVEMENT, COURSES NOT COMPLETED AT CERRITOS COLLEGE MUST BE COMPARABLE IN CONTENT, UNITS, AND GRANTED BY A COLLEGE OR UNIVERSITY ACCREDITED BY THE WESTERN ASSOCIATION OF SCHOOLS AND COLLEGES.

**THE CHILD DEVELOPMENT PERMIT**

The Child Development Department urges all students to apply for the permit as soon as they have completed six of the core units. After completing additional required units, students should apply for the next level.

For additional information on the Child Development permit ask for the booklet issued by the California Commission on Teacher Credentialing available in the Health Occupations Division office.

**B1. ASSISTANT – THE CHILD DEVELOPMENT PERMIT**

This level authorizes the instruction of children under the supervision of a teacher.
Curriculum and Requirements for Majors, Certificates and Transfer Programs

**COURSES (choose two from the following classes)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>Principles and Practices in Early Childhood Education</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>Introduction to Curriculum</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family, and Community</td>
</tr>
</tbody>
</table>

**B2. ASSOCIATE TEACHER – THE CHILD DEVELOPMENT PERMIT**

This authorizes instruction and supervision of an assistant.

**COURSES (MUST COMPLETE ALL OF THE CORE COURSES)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>Principles and Practices in Early Childhood Education</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>Introduction to Curriculum</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family, and Community</td>
</tr>
</tbody>
</table>

**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 program that also requires the Child Development permit.

**COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>Principles and Practices in Early Childhood Education</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>Introduction to Curriculum</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family, and Community</td>
</tr>
</tbody>
</table>

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:

**COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEC 230</td>
<td>Adult Supervision in Child Care Programs</td>
</tr>
</tbody>
</table>

AND

Six (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 courses must be taken in addition:

**COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>Principles and Practices in Early Childhood Education</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>Introduction to Curriculum</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family, and Community</td>
</tr>
</tbody>
</table>

Twelve additional Child Development units (choose from Certificate of Achievement – Early Childhood list)

**COURSES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEC 66</td>
<td>Administration and Supervision of Early Childhood Programs</td>
</tr>
<tr>
<td>CDEC 67</td>
<td>Advanced Administration and Supervision of Childhood Programs (offered in Spring semester only)</td>
</tr>
<tr>
<td>CDEC 230</td>
<td>Adult Supervision in Child Care Programs</td>
</tr>
</tbody>
</table>

Please note the required experience period.

**CERTIFICATES OF ACHIEVEMENT**

**C1. 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development</td>
</tr>
<tr>
<td>CD 124</td>
<td>Teaching in a Diverse Society</td>
</tr>
<tr>
<td>CD 139</td>
<td>Observation, Assessment, and Positive Guidance of Childhood Behavior</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>Principles and Practices in Early Childhood Education</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>Introduction to Curriculum</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family, and Community</td>
</tr>
<tr>
<td>CDEC 161</td>
<td>Health, Safety, and Nutrition</td>
</tr>
<tr>
<td>CDEC 164</td>
<td>Practicum Field Experience</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEC 62</td>
<td>Exploring Creative Art Expression by Children</td>
</tr>
<tr>
<td>CDEC 63</td>
<td>Early Childhood Experiences in Language Arts and Social Science</td>
</tr>
<tr>
<td>CDEC 65</td>
<td>Music and Movement for Children</td>
</tr>
<tr>
<td>CDEC 133</td>
<td>Early Childhood Experiences in Math and Sciences</td>
</tr>
<tr>
<td>CDEC 173</td>
<td>Early Childhood Education Occupational Work Experience</td>
</tr>
<tr>
<td>CDEC 174</td>
<td>Early Childhood Education Occupational Work Experience (4)</td>
</tr>
<tr>
<td>CDEC 230</td>
<td>Adult Supervision in Child Care Programs</td>
</tr>
<tr>
<td>CDTF 151</td>
<td>Infant and Toddler Development</td>
</tr>
<tr>
<td>CDTF 152</td>
<td>Infant and Toddler Programs</td>
</tr>
<tr>
<td>CDSA 152</td>
<td>School-Age Child Care Supervision and Administration (offered Spring Semester only)</td>
</tr>
<tr>
<td>CDSA 155</td>
<td>School-Age Child Care Activities (offered Fall semester only)</td>
</tr>
<tr>
<td>CDSE 50</td>
<td>Survey of Special Education</td>
</tr>
<tr>
<td>CDSE 52</td>
<td>Special Education Inclusion in Early Childhood Programs</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS** 30/31

* 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. 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:

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEC 66</td>
<td>Administration and Supervision of Early Childhood Education Programs 3</td>
</tr>
<tr>
<td>CDEC 67</td>
<td>Advanced Administration and Supervision of Early Childhood Education Programs (offered in Spring semester only) 3</td>
</tr>
<tr>
<td>CDEC 230</td>
<td>Adult Supervision in Child Care Programs 3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS** 39/40

## C3. 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.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development 3</td>
</tr>
<tr>
<td>CDEC 62</td>
<td>Exploring Creative Art Expression by Children 3</td>
</tr>
<tr>
<td>CDEC 63</td>
<td>Early Childhood Experiences in Language Arts and Social Sciences 3</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family, and Community 3</td>
</tr>
<tr>
<td>CDEC 161</td>
<td>Health, Safety, and Nutrition 3</td>
</tr>
<tr>
<td>CDSA 152</td>
<td>School-Age Child Care Supervision and Administration (offered in Spring semester only) 3</td>
</tr>
<tr>
<td>CDSA 155</td>
<td>School-Age Child Care Activities (offered in Fall semester only) 3</td>
</tr>
<tr>
<td>CDSA 259</td>
<td>School-Age Child Care Practicum 3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS** 24

## C4. 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.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development 3</td>
</tr>
<tr>
<td>CDEC 111</td>
<td>Principles and Practices in Early Childhood Education 3</td>
</tr>
<tr>
<td>CDEC 112</td>
<td>Introduction to Curriculum 3</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family, and Community 3</td>
</tr>
<tr>
<td>CDEC 161</td>
<td>Health, Safety, and Nutrition 3</td>
</tr>
<tr>
<td>CDIT 151</td>
<td>Infant and Toddler Development 3</td>
</tr>
<tr>
<td>CDIT 152</td>
<td>Infant and Toddler Programs 3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS** 24

## C5. CHILD DEVELOPMENT/SPECIAL EDUCATION

**NOTE:** APPLICATION FOR CERTIFICATE OF ACHIEVEMENT MUST BE MADE AT THE OFFICE OF ADMISSIONS AND RECORDS

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development 3</td>
</tr>
<tr>
<td>CD 124</td>
<td>Teaching in a Diverse Society 3</td>
</tr>
<tr>
<td>CD 139</td>
<td>Observation, Assessment and Positive Guidance of Childhood Behavior 3</td>
</tr>
<tr>
<td>CDEC 62</td>
<td>Exploring Creative Art Expression by Children 3</td>
</tr>
<tr>
<td>CDEC 133</td>
<td>Early Childhood Experiences in Math and Sciences 2</td>
</tr>
<tr>
<td>CDSE 50</td>
<td>Survey of Special Education 3</td>
</tr>
<tr>
<td>CDSE 52</td>
<td>Special Education Inclusion in Early Childhood Programs 3</td>
</tr>
<tr>
<td>CDSe 73/74</td>
<td>Special Education Assistant Occupational Work Experience 3-4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology 3</td>
</tr>
<tr>
<td>SL 101</td>
<td>Beginning American Sign Language 3</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS** 29/30

* 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.

## C6. EDUCATIONAL PARAPROFESSIONAL

<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development 3</td>
</tr>
<tr>
<td>CD 124</td>
<td>Teaching in a Diverse Society 3</td>
</tr>
<tr>
<td>CD 139</td>
<td>Observation, Assessment and Positive Guidance of Childhood Behavior 3</td>
</tr>
<tr>
<td>CDEC 62</td>
<td>Exploring Creative Art Expression by Children 3</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family, and Community 3</td>
</tr>
<tr>
<td>CDSA 90</td>
<td>Introduction to Elementary and Secondary Classroom Experience 3</td>
</tr>
<tr>
<td>CDSe 73/74</td>
<td>Special Education Assistant Occupational Work Experience 3-4</td>
</tr>
<tr>
<td>CDSe 73</td>
<td>Special Education Inclusion in Early Childhood Programs 3</td>
</tr>
<tr>
<td>EDT 52</td>
<td>Windows for Educators 1</td>
</tr>
<tr>
<td>EDT 110</td>
<td>Introduction to Educational Technology 2</td>
</tr>
</tbody>
</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. Plus, for an AA Degree a student must complete general education requirements to achieve a minimum of 60 units.
COMPUTER AND INFORMATION SCIENCES

CAREER OPPORTUNITIES:
Compiler
Systems Operator
Web Designer
iSeries 400 Specialist

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS

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

Choose 5 units from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 70A</td>
<td>Network Fundamentals</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 121</td>
<td>Introduction to the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 141A</td>
<td>Operate iSeries (AS/400) using Operations Navigator</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 Major Programming</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 for the World Wide Web</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 271/272</td>
<td>CIS Occupational Work Experience</td>
<td>1/2</td>
</tr>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</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 a 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.

MICROCOMPUTER SPECIALIST

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 Software</td>
<td>3</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>or ENGL 52**</td>
<td>Introduction to College Composition</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 100*</td>
<td>Freshman Composition</td>
<td>(3)</td>
</tr>
<tr>
<td>or 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 Code</th>
<th>Course 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 Major 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 Major Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 212</td>
<td>Introduction to Microsoft Windows Administration</td>
<td>3.5</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</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.
## Networking Technicians/Operators

### Certificate of Achievement

#### Required Courses

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

Choose 10.5 units from the following courses:

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

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

### Operator

#### Certificate of Achievement

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 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>3.5</td>
</tr>
<tr>
<td>CIS 103</td>
<td>Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 141</td>
<td>AS/400 Operations</td>
<td>3</td>
</tr>
<tr>
<td>CIS 141A</td>
<td>Operate iSeries (AS/400) using Operations Navigator</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 240</td>
<td>AS/400 Control Language Major Programming</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 147**</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 52**</td>
<td>Introduction to College Composition</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 100**</td>
<td>Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>or ENGL 155**</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose 15 units from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOT 52</td>
<td>Data Entry</td>
<td>2</td>
</tr>
<tr>
<td>CIS 58A</td>
<td>PC Operating System A+ Certification</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 70A</td>
<td>Networking Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CIS 75</td>
<td>SQL/Administration</td>
<td>3</td>
</tr>
<tr>
<td>CIS 105</td>
<td>Using Microsoft Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 121</td>
<td>Introduction to Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 140</td>
<td>Query/400</td>
<td>1</td>
</tr>
<tr>
<td>CIS 175</td>
<td>RPG Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 201</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 207</td>
<td>SQL Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 208</td>
<td>Oracle Database Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 212</td>
<td>Introduction to Microsoft Windows</td>
<td>3.5</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>
</tbody>
</table>

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.

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

### Programmer

#### Certificate of Achievement

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 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>3.5</td>
</tr>
<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>or CIS 180</td>
<td>Programming in C/C++</td>
<td>3.5</td>
</tr>
<tr>
<td>or CIS 182</td>
<td>Java Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 207</td>
<td>Database Design and SQL</td>
<td>3.5</td>
</tr>
<tr>
<td>or CIS 208A</td>
<td>Oracle SQL and PL/SQL Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>or CIS 208B</td>
<td>Oracle Database Applications</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 221</td>
<td>Advanced Visual Basic</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 221A</td>
<td>Object-Oriented Programming in VB.NET</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 282</td>
<td>Advanced Java Major Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 292</td>
<td>Data Structures</td>
<td>3.5</td>
</tr>
<tr>
<td>BCOM 147**</td>
<td>Business Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose 12 units from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 80</td>
<td>Programming in Access</td>
<td>3</td>
</tr>
<tr>
<td>CIS 82</td>
<td>Visual Basic Scripting</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 121</td>
<td>Introduction to Internet for Information Systems/Information Technology</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 125</td>
<td>JavaScript Programming</td>
<td>1.5</td>
</tr>
</tbody>
</table>
CIS 140  
Query/400  
CIS 141  
AS/400 Operations  
CIS 160  
Web Page Development  
CIS 175  
RPG Major Programming  
CIS 176  
COBOL Major Programming  
CIS 186  
Visual Basic.NET Major Programming  
CIS 180  
Programming in C/C++  
CIS 182  
Java Major Programming  
CIS 201  
Systems Analysis and Design  
CIS 205  
Programming in HTML for the World Wide Web  
CIS 206  
XML Scripting  
CIS 207  
Database Design and SQL  
CIS 208A  
Oracle SQL and PL/SQL Major Programming  
CIS 208B  
Oracle Database Applications  
CIS 212  
Introduction to Microsoft Windows Administration  
CIS 214  
Unix  
CIS 221  
Advanced Visual Basic  
CIS 221A  
Object-Oriented Programming in VB.NET  
CIS 221B  
Database Programming in VB.NET  
CIS 222  
Advanced RPG Major Programming  
CIS 223  
VisualAge RPG  
CIS 224  
Advanced COBOL Major Programming  
CIS 271/272/273/274  
CIS Occupational Work Experience  
CIS 280  
Object-Oriented Programming in C++  
CIS 281  
Windows Programming with Visual C#.NET  
CIS 282  
Advanced Java Major Programming  
CIS 283A  
Java Server Pages (JSP) Major Programming  
CIS 284  
CGI and DANCRL Major Programming  
CIS 285  
Active Server Pages Major Programming  
CIS 285A  
Active Server Pages.NET Major Programming  

TOTAL CERTIFICATE REQUIREMENTS: 38/39

*Meets AA Degree General Education – “Communication and Analytical Thinking” requirement. MATH 60 may be substituted.

**Meets AA Degree General Education – “English Composition” requirement.

NOTE: CIS 52, 101, 102, and 103 meet AA Degree General Education “Communication and Analytic Thinking” requirement and the “AA Math Proficiency” requirement.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Meet the requirements for a Certificate of Achievement in Computer and Information Sciences Programmer and complete general education requirements and electives to achieve a minimum of 60 units.

See Cerritos College Graduation Requirements.

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

Please see counselors or the respective department for additional alternatives.

COMPUTER AND INFORMATION SCIENCES
SYSTEMS ANALYST

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS:  UNITS

<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 Major 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 Major 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 208</td>
<td>Oracle SQL and PL/SQL</td>
<td>(3)</td>
</tr>
<tr>
<td>BCOM 147**</td>
<td>Programming in Access</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>Introduction to Microsoft Windows Administration</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 271/272/273/274</td>
<td>CIS Occupational Work Experience</td>
<td>1/2/3/4</td>
</tr>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CIS 281</td>
<td>Windows Programming w/Visual C#.NET</td>
<td>3</td>
</tr>
<tr>
<td>CIS 282</td>
<td>Advanced Java Major Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 283A</td>
<td>Java Server Pages (JSP) Major Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 284</td>
<td>CGI and DANCRL Major Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 285</td>
<td>Active Server Pages Major Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 285A</td>
<td>Active Server Pages.NET Major Programming</td>
<td>3.5</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 42.5

*Meets general education requirement, may substitute MATH 60

**Meets general education requirement, may substitute ENGL 100

NOTE: CIS 52, 101, 102, or 103 meet AA Degree general education communication and analytical 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.
A+ CERTIFICATION PREPARATION

VERIFICATION OF COMPLETION

REQUIRED COURSES | UNITS
---|---
CIS 58A | PC Operating System A+ Certification | 3.5
CIS 58B | PC Core Hardware A+ Certification | 3.5

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.

ANALYST

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS: | UNITS
---|---
CIS 103 | Computer Programming Logic | 3.5
CIS 186 | Visual Basic.NET Major 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.

CYBER SECURITY

VERIFICATION OF COMPLETION

REQUIRED COURSES | UNITS
---|---
CIS 70A | Network Fundamentals | 3.5
CIS 70K | Wireless Network | 3
CIS 70L | Network Security Fundamentals | 3.5
CIS 72B | Special Topics in Security | 3.5
CIS 213H | Microsoft Windows Security | 3.5

TOTAL VERIFICATION REQUIREMENTS | 17

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

DATABASE APPLICATION DEVELOPMENT FOR MICROSOFT ACCESS

VERIFICATION OF COMPLETION

REQUIRED COURSES | UNITS
---|---
CIS 80 | Programming in Access | 3.5
CIS 103 | Computer Programming Logic | 3.5
CIS 155 | Microsoft Access | 3.5
CIS 186 | Visual Basic.NET Major Programming | 3.5

TOTAL VERIFICATION REQUIREMENTS: | 14

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

IBM ISERIES 400 SERVER OPERATORS

VERIFICATION OF COMPLETION

REQUIRED COURSES | UNITS
---|---
CIS 103 | Computer Programming Logic | 3.5
CIS 141 | iSeries 400 Operations | 3
CIS 141A | Operations Navigator | 1.5
CIS 240 | Control Language Major Programming | 3

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.

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**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 70A Network Fundamentals</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 70B LAN</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 70D TCP/IP</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 70E Switching/Routing</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 70F Advanced Switching/Routing</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Total Verification Requirements: 15.5

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

### Software Development in C++/Visual C#

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</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>
</tbody>
</table>

Total Verification Requirements: 13

CIS 103 may be replaced by CIS 182 with the approval of the department or the requirement may be met by successfully submitting a requisite clearance form or a Requisite Clearance Request form.

A verification of completion in the Software Development in C++/Visual C# will be granted by the division upon completion of 13 units.

### Software Development in Database Application

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103 Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 186 Visual Basic.NET Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 207 Database Design and SQL</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 221B Database Programming in VB.NET</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Verification Requirements: 13.5

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

### Software Development in Java

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103 Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 182 Java Major Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 282 Advanced Java Major Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 283A Java Server Pages (JSP) Major Programming</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Total Verification Requirements: 14

The CIS 103 requirement may be met by successfully submitting a Requisite Clearance form or a Requisite Challenger and Waiver form.

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

### Software Development in the Unix/Linux Environment

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 105 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 214 Unix/Linux Fundamentals</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Total Verification Requirements: 10.5

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

### Software Development in Visual Basic.NET

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 103 Computer Programming Logic</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 186 Visual Basic.NET Programming</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 221A Object-Oriented Programming in VB.NET</td>
<td>3</td>
</tr>
<tr>
<td>CIS 221B Database Programming in VB.NET</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Verification Requirements: 13

CIS 103 may be replaced by CIS 180 or CIS 182 with the approval of the department, or the requirement may be met by successfully submitting a Requisite Clearance Request form or a Requisite Challenge & Waiver form.

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.

### Unix Administration

**Verification of Completion**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 214 Unix/Linux Fundamentals</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 215B Solaris Administration I</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 215C Solaris Administration II</td>
<td>3.5</td>
</tr>
</tbody>
</table>

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.
WEB CLIENT DEVELOPMENT

VERIFICATION OF COMPLETION

REQUISITE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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.

WEB SERVER DEVELOPMENT

VERIFICATION OF COMPLETION

REQUISITE COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 Major 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>ASENET Major Programming</td>
<td>3.5</td>
</tr>
</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.

COMPUTER SCIENCE

TRANSFER MAJOR REQUIREMENTS

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 Code</th>
<th>Course 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 – Fullerton

A maximum of 6 units of a grade of “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 Code</th>
<th>Course 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 Code</th>
<th>Course 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>(5)</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>(5)</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 Computer Science 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 CSU:

California State University – Long Beach

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

Minimum of 12 units of approved science-electives to include a two-semester science sequence.

Take either

<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>and CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>or PHYS 201</td>
<td>Engineering Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>and PHYS 202</td>
<td>Engineering Physics</td>
<td>(4)</td>
</tr>
</tbody>
</table>

California State University – Los Angeles

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 205</td>
<td>Programming in HTML for the World Wide Web</td>
<td>1.5</td>
</tr>
<tr>
<td>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>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

NOTE: 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

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

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.
Computer Science and Computer Science and Engineering are highly competitive and require 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 DEGREE 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.

COSMETOLOGY

CAREER OPPORTUNITIES:
Hair Dresser
Esthetician
Day Salon or Spa Owner
Distributors of Specialty Skin Care
Product Educators
Make-up Artist on Movie Sets, Television and Theaters

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 Programs 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 Programs by enrolling in one of the following plans:

FULL TIME DAYS: The full-time day student may complete the 1600-hour program 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 programs.

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>Description</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>
<tr>
<td>or COS 70A</td>
<td>Introductory Cosmetology</td>
<td>(8.0)</td>
</tr>
<tr>
<td>COS 51A</td>
<td>Intermediate Cosmetology I</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 51B</td>
<td>Intermediate Cosmetology II</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 51C</td>
<td>Intermediate Cosmetology III</td>
<td>6.5</td>
</tr>
<tr>
<td>or COS 70B</td>
<td>Intermediate Cosmetology</td>
<td>(8.0)</td>
</tr>
<tr>
<td>COS 52A</td>
<td>Advanced Cosmetology I</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 52B</td>
<td>Advanced Cosmetology II</td>
<td>6.5</td>
</tr>
<tr>
<td>COS 52C</td>
<td>Advanced Cosmetology III</td>
<td>6.5</td>
</tr>
<tr>
<td>or COS 70C</td>
<td>Advanced Cosmetology Manipulation</td>
<td>(8.0)</td>
</tr>
</tbody>
</table>

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**

**UNITS**

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

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 manicurists. The emphasis will be on understanding the requirements required to achieve a cosmetology license.

COS 25 | Introduction to Cosmetology Careers | 2.0 |

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

**ESTHETICIAN**

**MAJOR REQUIREMENTS**

**UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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**

**UNITS**

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

**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 Major Requirements 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 Major Requirements.

**PART-TIME – DAYS:** the student may complete the 600-hour Major Requirements 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 Major Requirements.

**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 3) electives as needed.

See Cerritos College Graduation Requirements

**COURT REPORTING AND CAPTIONING CAREERS**

**CAREER OPPORTUNITIES:**

Court Reporter in Superior and Municipal Courts and the deposition field.

**STATE REQUIREMENTS**

The Court Reporters Board of California issues a certificate upon successful completion of the following requirements and passing of the state examination.

**HOURS**

- English and Vocabulary | 215
- Medical | 125
- Legal | 175
- Transcript Procedures | 55
- Apprenticeship Training | 60
- Technology | 25
- Resource Materials | 5

**TOTAL MINIMUM PRESCRIBED ACADEMIC HOURS** | 660

**TOTAL MACHINE SHORTHAND AND TRANSCRIPTION** | 2300

Choose from the following courses to meet the Court Reporters Board minimum required hours:

**May Be Taken Hours**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 57A</td>
<td>Beginning Aural Language Skills for Court Reporters</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 57B</td>
<td>Advanced Aural Language Skills for Court Reporters</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 113</td>
<td>Legal Terminology</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 114</td>
<td>Medical Terminology for Machine Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 115</td>
<td>Medical Shorthand for Court Reporters</td>
<td>4</td>
</tr>
<tr>
<td>CRCC 119A</td>
<td>Beginning Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>CRCC 119C</td>
<td>Advanced Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>CRCC 173/174</td>
<td>Court Reporting/ Captioning Careers</td>
<td>2</td>
</tr>
<tr>
<td>CRCC 185</td>
<td>CSR/RPR Examination Preparation</td>
<td>1.5</td>
</tr>
<tr>
<td>CRCC 192</td>
<td>Transcription Procedures</td>
<td>2</td>
</tr>
</tbody>
</table>

See Cerritos College Graduation Requirements
Curriculum and Requirements for Majors, Certificates and Transfer Programs

Machine Courses: All machine courses will count toward the 2300 minimum hours required by the Court Reporters Board.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 140</td>
<td>Computerized Shorthand Theory</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 141</td>
<td>Computerized Shorthand Theory Review</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 140A/B</td>
<td>Computerized Shorthand Theory Lab</td>
<td>2</td>
</tr>
<tr>
<td>CRCC 141A/B</td>
<td>Computerized Shorthand Theory Review/Skill A/B</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 142–144</td>
<td>Computerized Shorthand (142–144)</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 145–146</td>
<td>Computerized Shorthand (145–146)</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 147–149</td>
<td>Computerized Shorthand (147–149)</td>
<td>3</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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 50</td>
<td>Computer-Aided Proofreading</td>
<td>2</td>
</tr>
<tr>
<td>BCOT 162</td>
<td>Business Spelling and Proofreading Skills</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 46</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 53</td>
<td>Punctuation, Capitalization, and Spelling</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 107</td>
<td>Vocabulary Building</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 108</td>
<td>Vocabulary Building for Professionals</td>
<td>2</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:

a) The student shall pass three 5-minute tests with 95% accuracy at each of the following speeds: 225 words-per-minute testimony (two-voice), 200 words-per-minute jury charge, and 180 words-per-minute literary.

b) The student shall pass at least two 5-minute time writings in keyboarding at a minimum of 60 gross words-per-minute with a maximum of 5 errors.

c) The student shall complete at least 60 verified hours of apprentice internship.

Achieve the minimum of 225 wpm shorthand speed and 60 net wpm typing speed.

Complete general education requirements and electives to achieve a minimum of 60 units. Plus Business courses as follows:

<table>
<thead>
<tr>
<th>Course 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</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>2</td>
</tr>
<tr>
<td>CRCC 119D</td>
<td>Basic Concepts of Realtime</td>
<td>2</td>
</tr>
<tr>
<td>CRCC 149</td>
<td>Computerized Shorthand Speed Building (190-225 wpm)</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL REQUIREMENTS: 25

BEGINNING REALTIME CAPTIONER/ BROADCAST CAPTIONING

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 119D</td>
<td>Basic Concepts of Realtime</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 130</td>
<td>Computerized Shorthand Realtime Practicum IV (190-225) WPM</td>
<td>4.5</td>
</tr>
<tr>
<td>CRCC 193B</td>
<td>Basic Broadcast Captioning</td>
<td>3</td>
</tr>
<tr>
<td>* CRCC 173/174</td>
<td>Court Reporting/Captioning Careers Occupational Work Experience</td>
<td>3/4</td>
</tr>
<tr>
<td>SL 101</td>
<td>Beginning American Sign Language</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL REQUIREMENTS: 15.5/16.5

*Mandatory stenotype speed of 200 WPM

CART REPORTER/REALTIME CAPTIONER

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 119D</td>
<td>Basic Concepts of Realtime</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 128</td>
<td>Computerized Shorthand Realtime Practicum IV</td>
<td>5</td>
</tr>
<tr>
<td>CRCC 193A</td>
<td>Basic Captioning</td>
<td>5</td>
</tr>
<tr>
<td>CRCC 173/174</td>
<td>Court Reporting/Captioning Careers Occupational Work Experience</td>
<td>3/4</td>
</tr>
<tr>
<td>SL 101</td>
<td>Beginning Sign Language</td>
<td>2</td>
</tr>
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</table>

TOTAL REQUIREMENTS: 15.5/16.5

CERTIFIED REALTIME REPORTER

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS:

<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</td>
<td>3.5</td>
</tr>
<tr>
<td>CRCC 119C</td>
<td>Advanced 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 130</td>
<td>Computerized Shorthand Realtime Practicum (190-225 wpm)</td>
<td>4.5</td>
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</table>

TOTAL REQUIREMENTS: 14
PROOFREADER – COURT REPORTING METHOD

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS: 

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 57A</td>
<td>Beginning Aural Language Skills for Court Reporters</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 57B</td>
<td>Advanced Aural Language Skills for Court Reporters</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 113</td>
<td>Legal Terminology</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 139</td>
<td>Career Opportunities</td>
<td>1</td>
</tr>
<tr>
<td>CRCC 192</td>
<td>Transcription Procedures</td>
<td>2</td>
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</tbody>
</table>

TOTAL REQUIREMENTS: 12

REALTIME RAPID TEXT ENTRY

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENTS: 

<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</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 119D</td>
<td>Basic Concepts of Realtime</td>
<td>2</td>
</tr>
<tr>
<td>CRCC 125</td>
<td>Computer Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 139</td>
<td>Career Opportunities</td>
<td>1</td>
</tr>
<tr>
<td>CRCC 146</td>
<td>Computerized Shorthand Speed Building (140-170 wpm)</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL REQUIREMENTS: 12

SCOPIST FOR COURT REPORTERS

VERIFICATION OF COMPLETION

DIVISION/DEPARTMENT REQUIREMENT:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRCC 9B</td>
<td>Intermediate Procat Software</td>
<td>1</td>
</tr>
<tr>
<td>or CRCC 10B</td>
<td>Intermediate Case Catalyst</td>
<td>(1)</td>
</tr>
<tr>
<td>CRCC 57B</td>
<td>Advanced Aural Language Skills for Court Reporters</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 113</td>
<td>Legal Terminology</td>
<td>3</td>
</tr>
<tr>
<td>CRCC 119C</td>
<td>Advanced Computer-Aided Transcription</td>
<td>2</td>
</tr>
<tr>
<td>or CRCC 119G</td>
<td>Computer-Aided Transcription for Scopists</td>
<td>(2)</td>
</tr>
<tr>
<td>CRCC 139</td>
<td>Career Opportunities</td>
<td>1</td>
</tr>
<tr>
<td>CRCC 192</td>
<td>Transcription Procedures</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL REQUIREMENTS: 15

CULINARY ARTS

CHEF’S TRAINING

CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 52</td>
<td>Introduction to Commercial 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 or chef, steward. Also, short order cook pantry person, garde helper, or roast cook.

PROFESSIONAL BAKING AND PASTRY

CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 Skills</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, or specialty baker.

DANCE

CAREER OPPORTUNITIES:

Teacher
Perform in Dance Companies
Perform on Television and Films
Choreographer

MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 100</td>
<td>Dance Appreciation</td>
<td>3</td>
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<tr>
<td>DANC 101</td>
<td>History of Dance</td>
<td>3</td>
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<tr>
<td>DANC 105</td>
<td>Introduction to Dance Movement</td>
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<tr>
<td>DANC 106A</td>
<td>Beginning Ballet</td>
<td>2</td>
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<tr>
<td>DANC 106B</td>
<td>Intermediate Ballet</td>
<td>2</td>
</tr>
<tr>
<td>DANC 108A</td>
<td>Dance, Modern, Beginning</td>
<td>2</td>
</tr>
<tr>
<td>DANC 108B</td>
<td>Dance, Modern, Intermediate</td>
<td>2</td>
</tr>
<tr>
<td>DANC 110</td>
<td>Commercial Dance</td>
<td>2</td>
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</tbody>
</table>

TOTAL 19

CAREER OPPORTUNITIES:

Choreography or Performance Emphasis:
Optional: For students wishing additional dance experience in the areas of choreography or performance

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>DANC 120</td>
<td>Partnering for Dance</td>
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<tr>
<td>DANC 130</td>
<td>Choreography</td>
<td>2</td>
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</tbody>
</table>

107
Curriculum and Requirements for Majors, Certificates and Transfer Programs

DANC 131 Dance Notation 3
DANC 133 Dance Production 2
DANC 134 Dance Performance 2
DANC 136 Dance Repertory 2

RECOMMENDED ELECTIVE COURSES
DANC 50 Individualized Dance Development 1
DANC 107 Ballet Variations 2
DANC 109 Introduction to Dance Cultures of the World 2
DANC 121 Latin Social 2
DANC 122 Middle Eastern Dance 2
DANC 123 African Dance 2
DANC 124 Hip Hop Dance 2
DANC 125 Introduction to Ballroom 2
DANC 132 Dance of Digital Technology 3
DANC 135 Dance Workshop 2
DANC 140 Beginning Jazz Dance 2
DANC 141 Intermediate Jazz Dance 2
DANC 142 Beginning Tap Dance 2
DANC 143 Intermediate Tap Dance 2
DANC 144 Dance for Musical Theatre 2
PE 138 Yoga 1
PE 139 Pilates Conditioning 1

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

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

TRANSFER MAJOR REQUIREMENTS:

The Dance Department provides a major with studies in techniques in Modern Ballet, Commercial, and World Dance and includes composition and performance courses. It gives the General Education student and the student in closely related areas, experience in dance as an art form. The following core of courses will provide the dance student with a solid background for upper division work and a transfer curriculum. See Counselor for details.

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

DANC 108A Modern Dance (Beginning) 2
DANC 108B Modern Dance (Intermediate) 2
DANC 106A Ballet (Beginning) 2
DANC 106B Ballet (Intermediate) 2
DANC 101 History of Dance 3
DANC 142 Beginning Tap Dance 2
DANC 143 Intermediate Tap Dance 2

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University Fullerton:
DANC 108A Modern Dance, Beginning 2
DANC 108B Modern Dance, Intermediate 2
DANC 106A Ballet, Beginning 2
DANC 106B Ballet, Intermediate 2
DANC 130 Choreography 3
DANC 131 Dance Notation 3

California State University Long Beach:
Fine Arts in Dance
ART 101 Art History I: Prehistory to Gothic 3
ART 102 Art History II: Renaissance to Rococo 3
MUS 100 Music Appreciation 3
MUS 104 American Popular Music 3

Dance Science
A&P 151 Introduction to Human Physiology 4
or A&P 201 Human Physiology 5

California State University Los Angeles:
DANC 106A Beginning Ballet 2
DANC 106B Intermediate Ballet 2
DANC 130 Dance, Modern, Beginning 2
DANC 135 Dance Workshop 2
TH 110 Fundamentals of Acting 3.5
TH 145 Costume Production for Dance 1
TH 114 Voice for Acting 2

Theatre Arts Option:
TH 111 Intermediate Acting to Characterization 3.5
TH 120 Theatre Stagecraft 3
TH 212 Scene Study 3.5

Dance Option:
DANC 108B Dance, Modern, Intermediate 2

Electives in Dance (14 units):
(See counselor for additional units requirements for this emphasis)
DANC 106B Intermediate Ballet 2
DANC 130 Choreography Tap Dance 2
DANC 135 Dance Workshop 2
DANC 142 Beginning Tap Dance 2
DANC 143 Intermediate Tap Dance 2
TH 120 Theatre Stagecraft 3

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

University of California Riverside:
Complete up to 8 units from Modern Technique courses, such as but not limited to:
Only two courses have been articulated to meet the 8 units:
DANC 108A Dance Modern Beginning 2
DANC 108B Dance Modern Intermediate 2

(see counselor for additional advisement)

Complete up to 8 units from a dance genre other than Modern Technique such as but not limited to:

DANC 106A Beginning Ballet 2
DANC 106B Intermediate Ballet 2
DANC 142 Beginning Tap Dance 2
DANC 143 Intermediate Tap Dance 2

See counselor for additional unit requirements for this emphasis.
University of California Irvine:

Dance (All emphases electives)

DANC 101 History of Dance (lecture) 3
DANC 130 Choreography 3

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:
TH 110 Fundamentals of Acting 3.5

Choreography Emphasis:
TH 222 Stage Lighting 3

See counselor for additional unit requirements for this emphasis.

The department offers two degree program 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.

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

FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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<td>DA 51</td>
<td>Applied Dental Science I</td>
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<tr>
<td>DA 52</td>
<td>Dental Radiography I</td>
<td>2</td>
</tr>
<tr>
<td>DA 53</td>
<td>Introduction to Chairside Assisting</td>
<td>3</td>
</tr>
<tr>
<td>DA 54</td>
<td>Introduction to Operatory Procedures</td>
<td>4</td>
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</table>

SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tr>
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<tr>
<td>DA 62</td>
<td>Dental Radiography II</td>
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<tr>
<td>DA 63</td>
<td>Advanced Chairside Assisting</td>
<td>4</td>
</tr>
<tr>
<td>DA 64</td>
<td>Dental Office Management</td>
<td>2</td>
</tr>
<tr>
<td>DA 65</td>
<td>Clinical I Dental Schools</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>14</td>
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</table>
SUMMER SESSION
DA 75 Clinical II Cooperative Office Training 5
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 Major Requirements: CHEM 100, MICRO 200, A&P 200, A&P 201, and 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.

GOALS AND PROGRAM COMPETENCIES

The philosophy of the Associate Degree Dental Hygiene Program was developed to reflect the philosophy of Cerritos College.

The Dental Hygiene Department believes the program should provide opportunities for the student to reach her/his greatest potential in the profession of dental hygiene so she/he may achieve a sense of dignity, value, and personal worth in the community and in the world of work regardless of age, gender, or ethnicity.

The goals of the dental hygiene program are as follows:

I. To graduate an individual who is competent in providing preventive, educational, and therapeutic dental health services.

A. Graduates must be competent in providing dental hygiene care for the child, adolescent, adult, geriatric, and medically compromised patient.

B. Graduates must be competent in providing the dental hygiene process of care which includes assessment, planning, implementation, and evaluation.

C. Graduates must be competent in providing dental hygiene care for all types of periodontal disease including patients who exhibit moderate to severe periodontal disease.

D. Graduates must be competent in providing appropriate life support measure for medical emergencies that may be encountered in dental hygiene practice.

II. To instill within the student a philosophical appreciation of ethical and moral values suited to the laws of the community as outlined by the American Dental Hygienist’s Association and the American Dental Association.

A. Graduates must be competent in applying ethical, legal, and regulatory concepts to the provision and/or support of oral health care services.

III. To encourage the student to develop professional behavior that is founded in evidence-based decision making, self-directed learning, and self-assessment to enhance professional competence.

A. Graduates must be competent in the application of self-assessment skills to prepare them for lifelong learning.

B. Graduates must be competent in the evaluation of current scientific literature.

C. Graduates must be competent in problem solving strategies related to comprehensive patient care and management of patients.

IV. To graduate an individual who is competent in providing health education programs to the community supporting total health through the promotion of optimal oral health.

A. Graduates must be competent in interpersonal and communication skills to effectively interact with diverse population groups.

B. Graduates must be competent in assessing, planning, implementing, and evaluating community-based oral health programs including health promotion and disease prevention activities.

V. To promote patient satisfaction of the dental hygiene care provided by the student clinician.

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 grades of Pass or “C” or higher.
II. REQUIRED TESTS AND INFORMATION

A. Cerritos College Assessment Tests Battery
Receive satisfactory scores on the Cerritos College Assessment/Placement Tests or achieve clearance by taking the appropriate college courses. A 12th grade reading level is required for admission into the program. Students must have clearance for ENGL 100, MATH 80, and READ 54 or equivalent.

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 official copies 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). It is the applicants responsibility to verify all information has been received by the deadline.

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 bloodborne and infectious diseases are available upon request from the Dental Hygiene Department or can be found 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 $12,000 for books and instruments, equipment, uniforms, immunizations, and miscellaneous fees. Students are strongly encouraged to join the Student American Dental Hygienists’ Association (SADHA) ($65.00 annually). Fees are subject to change.

C. Students are responsible for their own living arrangements, uniform, laundry, and transportation to clinical agencies.

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 no contender 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.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS
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

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<tr>
<th>SEMESTER</th>
<th>COURSE</th>
<th>UNITS</th>
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<tr>
<td>First Semester</td>
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<tr>
<td>DH 110</td>
<td>Preventive Dentistry I</td>
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<td>DH 111</td>
<td>Infection Control and Dental Office Emergencies</td>
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<td>DH 112</td>
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<td>DH 114</td>
<td>Dental Hygiene Clinical Sciences I</td>
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<td>DH 115C</td>
<td>Pre-Clinical Dental Hygiene I</td>
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<tr>
<td>DH 116</td>
<td>Head and Neck Anatomy</td>
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<td>DH 119</td>
<td>Dental Embryology, Histology and Anatomy</td>
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<td><strong>TOTAL UNITS</strong></td>
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| Second Semester     |                               |       |
| DH 120              | Preventive Dentistry II       | 2     |
| DH 125              | Dental Hygiene Clinical Sciences II | 2 |
| DH 125C             | Clinical Dental Hygiene II    | 3     |
| DH 126              | General and Oral Pathology    | 2     |
| DH 127              | Pharmacology                  | 2     |
| DH 128              | Management of Pain            | 2     |
| DH 129              | Applied Periodontics          | 2     |
| **TOTAL UNITS**     |                               | 15    |

Summer Session

<table>
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<tr>
<th>COURSE</th>
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<tr>
<td>DH 150C</td>
<td>Clinical Dental Hygiene IIA</td>
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SECOND YEAR

First Semester

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<th>COURSE</th>
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<tr>
<td>DH 232L</td>
<td>Dental Materials Laboratory</td>
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<tr>
<td>DH 234</td>
<td>Dental Care for the Special Patient</td>
</tr>
<tr>
<td>DH 235</td>
<td>Dental Hygiene Clinical Sciences I</td>
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<td>DH 235C</td>
<td>Clinical Dental Hygiene II</td>
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<td>DH 238</td>
<td>Community Outreach I</td>
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<td>DH 239</td>
<td>Introduction to Dental Biostatistics and Research</td>
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Second Semester

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<tr>
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<td>DH 245</td>
<td>Dental Hygiene Clinical Sciences IV</td>
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<td>DH 245C</td>
<td>Clinical Dental Hygiene IV</td>
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<td>DH 248</td>
<td>Community Outreach II</td>
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<tr>
<td>DH 249</td>
<td>Principles of Community Oral Health</td>
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<td><strong>TOTAL UNITS</strong></td>
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**TOTAL CERTIFICATE REQUIREMENTS:** 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, 202, 220, and 221)
Introductory Sociology Principles (SOC 101, 201, 210, 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.

DENTAL HYGIENE TRANSFER PROGRAM
(The following curriculum does not lead to an Associate in Arts Degree. To earn an AA degree, see Dental Hygiene—in the catalog for the major requirements.)

University of Southern California
Minimum entrance requirements:
BIOL 201
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 for developments on the Dental Hygiene Program.

ECONOMICS

CAREER OPPORTUNITIES:
Price and Market Analyst
Planning Consultant

TRANSFER MAJOR REQUIREMENTS
LOWER DIVISION MAJOR PREPARATION
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University-Long Beach

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<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>ACCT 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
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<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological &amp; Soc. Sciences</td>
<td>4</td>
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<tr>
<td>or MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
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Option in Mathematical Economics and Economic Theory

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<th>Course Title</th>
<th>Units</th>
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</thead>
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<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
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<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
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California State University-Dominguez Hills

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 112</td>
<td>Elementary Statistics</td>
<td>4</td>
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</tbody>
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California State University-Los Angeles

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
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<td>3</td>
</tr>
<tr>
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<td>Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

California State University-Fullerton

Same requirements as Economics.

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.** Repetition of more than one preparation course or of any preparation course more than once results in automatic denial of admission to the major.

For more information regarding this major and UCLA's transfer selection process, visit, www.econ.ucla.edu and www.admissions.ucla.edu.

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>ACCT 102</td>
<td>Fundamentals of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological &amp; Soc. Sciences</td>
<td>4</td>
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</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 112</td>
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<td>4</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 102</td>
<td>Fundamentals of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>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.
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
or ENGL 103 Critical and 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)

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 Business Economics if they were originally admitted to a major outside the Department of Economics.

NOTE: The Business Economics major does not replicate the traditional undergraduate business school curriculum.

Repetition of more than one preparation courses or of any preparation course more than once results in automatic denial of admission to the major.

For more information regarding this major and the UCLA transfer selection process, visit www.econ.ucla.edu and www.admissions.ucla.edu.

ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
or ENGL 103 Critical and 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)
ACCT 101 Fundamentals of Accounting I 4
ACCT 102 Fundamentals of Accounting II 4

University of California, Irvine

ECONOMICS, BA

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.

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
and MATH 220 Analytic Geometry and Calculus III 4
and MATH 240 Calculus and Differential Equations 4
and CIS 182 Java Programming 3.5
and 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.

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
and MATH 220 Analytic Geometry and Calculus III 4
and MATH 240 Calculus and Differential Equations 4
CIS 182 JAVA Programming 3.5
and 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.

UC Irvine also offers a major in Quantitative Economics. Major preparation requirements can be obtained from www.ASSIST.org.

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

For more information regarding this major and UCLAs transfer selection process visit www.econ.ucla.edu and www.admissions.ucla.edu.
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 Macroeconomics 3
ECON 202 Principles of Microeconomics 3
ACCT 101 Fundamentals of Accounting 4

NOTE: Cerritos’ ACCT 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

NOTE: There are also majors in Economics/Administrative Studies and Economics/Law and Society.

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 units minimum and the AA degree general education requirements for a total of at least 60 units.

EDUCATIONAL TECHNOLOGY

CAREER OPPORTUNITIES:
Electronic Technician
Teacher
Educational Technology Trainer

EDUCATIONAL TECHNOLOGY

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS UNITS
You must complete 11 units in the following area:
EDT 100 Integration of the Internet to the Curriculum 2
EDT 103 Spreadsheets for Educators 2
EDT 104 Word Processing for Educators 2
EDT 105 PowerPoint for Educators 2
EDT 111 Web Design Using FrontPage 1
EDT 125 Fundamentals of Teaching Online Courses 2

Additional Requirements – You must complete 7 units in the following area:
EDT 19 Fundamentals of Teleconferencing 1
EDT 43 Ed Tech Occupational Work Experience 3
EDT 50 Preparation for Online Learning 1
EDT 51 Email for Educators 1
EDT 52 Windows for Educators 1
EDT 53 Macintosh for Educators 1
EDT 57 Apple/Claris Works for Educators 1
EDT 67 Inspiration Presentations 1
EDT 68 Using KidPix 1
EDT 81 Videos for School Use 2
EDT 101 Creating Curriculum Projects Using the Internet 1
EDT 106 Access for Educators 2
EDT 107 Desktop Publishing for Educators 1
EDT 108 Photoshop Elements for Educators 2
EDT 109 Developing Campus Based Portfolios 1
EDT 112 Virtual Curriculum 3
EDT 114 Microsoft Producer for Educators 2
EDT 115 Technology Integration in Education 1
EDT 119 Hardware and Software Considerations for Educators 1
EDT 120 Exploring Assistive Technology in Education 2
EDT 121 Using Handheld Computers in Education 2
EDT 122 Fundraising/Grand Writing for Educators 2
EDT 123 Internet tools for Educators 2
EDT 132 Using Audio in the Classroom 2
EDT 137 iMovie/Movie Maker in Education 2
EDT 138 Teaching with Clay Animation 2
EDT 150 Podcasting in Education 2
ART 196 Introduction to Designing Web Graphics 3
CIS 50 Computer Literacy .5
CIS 121 Introduction to Internet 1.5
PHOT 112 Intermediate Digital Photography 3

TOTAL CERTIFICATE REQUIREMENTS: 18

To be awarded a Certificate of Achievement by the college, a student must complete all major requirements and 9 additional units from the list above to total a minimum of 18 units.

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.

INSTRUCTIONAL MULTI-MEDIA

CERTIFICATE OF ACHIEVEMENT

DIVISION/DEPARTMENT REQUIREMENTS UNITS
You must complete 11 units in the following area:
EDT 19 Fundamentals of Teleconferencing 1
EDT 82 Interactive Multi-Media in Curriculum 1
EDT 100 Integration of the Internet Into Curriculum 2
EDT 105 PowerPoint for Educators 2
EDT 107 Desktop Publishing for Educators 1
EDT 111 Web Design for Educators 1
EDT 119 Hardware and Software Considerations for Educators 1
EDT 125 Fundamentals of Online Teaching 2

Additional Requirements – You must complete 7 units in the following area:
EDT 43 EdTech Occupational Work Experience 3
EDT 50 Preparation for Online Learning 1
EDT 51 Email for Educators 1
EDT 53 Macintosh for Educators 1
EDT 57 Apple/Claris Works for Educators 1
EDT 67 Inspiration Presentations 1
EDT 68 Using KidPix 1
EDT 81 Videos for School Use 2
EDT 101 Creating Curriculum Projects Using the Internet 1
EDT 106 Access for Educators 2
EDT 107 Desktop Publishing for Educators 1
EDT 108 Photoshop Elements for Educators 2
EDT 109 Developing Campus Based Portfolios 1
EDT 112 Virtual Curriculum 3
EDT 114 Microsoft Producer for Educators 2
EDT 115 Technology Integration in Education 1
EDT 119 Hardware and Software Considerations for Educators 1
EDT 120 Exploring Assistive Technology in Education 2
EDT 121 Using Handheld Computers in Education 2
EDT 122 Fundraising/Grand Writing for Educators 2
EDT 123 Internet tools for Educators 2
EDT 132 Using Audio in the Classroom 2
EDT 137 iMovie/Movie Maker in Education 2
EDT 138 Teaching with Clay Animation 2
EDT 150 Podcasting in Education 2
ART 196 Introduction to Designing Web Graphics 3
CIS 50 Computer Literacy .5
CIS 121 Introduction to Internet 1.5
PHOT 112 Intermediate Digital Photography 3

TOTAL CERTIFICATE REQUIREMENTS: 18
Curriculum and Requirements for Majors, Certificates and Transfer Programs

EDT 52  Windows for Educators  1
EDT 53  Macintosh for Educators  1
EDT 57  Apple/Claris Works for Educators  1
EDT 67  Inspiration Presentations  1
EDT 68  Using KidPix  1
EDT 81  Videos for School Use  2
EDT 101  Creating Curriculum Projects Using the Internet  1
EDT 106  Access for Educators  1
EDT 112  Virtual Curriculum  3
EDT 115  Technology Integration in Education  1
EDT 120  Exploring Assistive Technology in Education  2
ART 196  Introduction to Designing Web Graphics  3
CIS 50  Computer Literacy .5
CIS 121  Introduction to Internet  1.5
PHOT 112  Intermediate Digital Photography  3

TOTAL CERTIFICATE REQUIREMENTS:  18

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete all 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.

ENGINEERING

CAREER OPPORTUNITIES:

Engineer
Professor of Engineering
Aerospace Technician

TRANSFER MAJOR REQUIREMENTS

COMMON LOWER DIVISION PREPARATION FOR MOST COLLEGES OF ENGINEERING (CORE)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytic Geometry and Calculus III</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
</tr>
</tbody>
</table>

Schools of engineering have similar basic science requirements but differ widely in the preparation for the various engineering options available. The following science, engineering, technical support, and math courses meet specific requirements for transfer as needed for the several options usually available at the four-year college level.

Contact a Cerritos engineering counselor for the specific requirements of the school and option you have selected in order to optimize preparation for transfer or www.ASSIST.ORG for lower division major requirements for most California public universities.

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
</tr>
</tbody>
</table>
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, 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, and Mechanical.

For Articulation Agreements go to: http://www.lmu.edu/PageFactory.aspx?PageiD=20288

University Of Southern California


For Articulation Agreements go to: http://viterbi.usc.edu/admission/transfer-guides.htm

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) the Engineering core, (2) ENGR 112 or ENGT 131, (3) CIS 177 or 178 or 180 or 280, (4) the Associate in Arts General Education Requirements.

ENGINEERING DESIGN TECHNOLOGY

CAREER OPPORTUNITIES:

Designer
Master Layout Person
Systems Designers
Tool Designer
CAD/CAM Designers

VERIFICATION OF COMPLETION

MACHINE DESIGN AND MANUFACTURING

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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</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 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>ENGT 258</td>
<td>Design and Production Technology with AutoCAD</td>
<td>4</td>
</tr>
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</table>

TOTAL UNITS: 17

3-D PARAMETRIC MODELING DESIGN AND PRESENTATIONS

<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>
</tbody>
</table>

TOTAL UNITS: 38

DIRECTED DESIGN TECHNOLOGY

CERTIFICATE OF ACHIEVEMENT

Recommended High School Preparation:

One year Algebra, one year of Mechanical Drafting

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>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 133</td>
<td>Sheet Metal Layout and Applications with Inventor</td>
<td>2</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 Design with AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 153</td>
<td>Machine Design with AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 160</td>
<td>AutoDesk MAP 3-D</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 237</td>
<td>Graphical Statics and Strength of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 255</td>
<td>AutoDesk VIZ Rendering and Solid Modeling Applications</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>ENGT 259</td>
<td>SolidWorks</td>
<td>4</td>
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</table>

TOTAL CERTIFICATE REQUIREMENTS: 38
ENGINEERING DESIGN AND PRODUCTION

TECHNOLOGY OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</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 258</td>
<td>Design and Production Technology with 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>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 55

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

RELATED TRANSFER PROGRAMS: Industrial(Engineering) Technology—Manufacturing Option.

See Cerritos College Graduation Requirements.

ENGLISH

CAREER OPPORTUNITIES:
Publications
Communications
Media, Entertainment
Creative Writing
Government
Business Management
Law
Theology
Psychology
Business Administration

TRANSFER MAJOR REQUIREMENTS

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University-Dominguez Hills
Select one of the recommended courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 232</td>
<td>Readings in Poetry</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 233</td>
<td>Readings in the Novel</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 234</td>
<td>Readings in Short Fiction</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 235</td>
<td>Readings in the Drama</td>
<td>(3)</td>
</tr>
</tbody>
</table>

California State University-Fullerton
Select two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 246A</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246B</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 230A</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 230B</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

California State University-Long Beach
In all options for the major, study of a foreign language is recommended.

Option in Literature: required lower-division courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 246A</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246B</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 230A</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 230B</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Option in English Education: required lower division.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 246A</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 246B</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 230A</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 230B</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
<tr>
<td>TH 101</td>
<td>Introduction to the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 130</td>
<td>Fundamentals of Speaking</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>ENGL 246A</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246B</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 248A</td>
<td>Masterpieces of World Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Single Subject Teaching Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 130</td>
<td>Fundamentals of Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

Students are advised to complete ENGL 103 as their CSUGE critical thinking requirement.
This will also meet a graduation requirement as the prerequisite for their writing proficiency requirement.

University of California – Berkeley

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 246A</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 228</td>
<td>Shakespeare's Plays</td>
<td>3</td>
</tr>
</tbody>
</table>

University of California-Irvine
Complete 202 of Intermediate College Level Foreign Language. Select one from the following: FRENCH, GERMAN, JAPANESE or SPANISH.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 230A</td>
<td>Readings in Poetry</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 230B</td>
<td>Readings in the Novel</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 232</td>
<td>Readings in Poetry</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 226A</td>
<td>Readings in Short Fiction</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 226B</td>
<td>Readings in the Drama</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 246A</td>
<td>Survey of English Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 246B</td>
<td>Survey of English Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 248A</td>
<td>Masterpieces of World Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 248B</td>
<td>Masterpieces of World Literature</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Complete any two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 230A</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 230B</td>
<td>Introduction to American Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 232</td>
<td>Readings in Poetry</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 233</td>
<td>Readings in the Novel</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 235</td>
<td>Readings in the Drama</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 246A</td>
<td>Survey of English Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 246B</td>
<td>Survey of English Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 248A</td>
<td>Masterpieces of World Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>or ENGL 248B</td>
<td>Masterpieces of World Literature</td>
<td>(3)</td>
</tr>
</tbody>
</table>

In addition, students are required to complete one course from the categories of writing, literature, history, and philosophy. For more information, consult www.ASSIST.org or a counselor.

University of California-Los Angeles

<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>ENGL 246A</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>and ENGL 246B</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
</tbody>
</table>
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

Recommended one course from the following:
- HIST 102 Political and Social History of the United States: 1500s to 1876 3
or HIST 103 Political and Social History of the United States: 1877 to present 3

Students intending to transfer should consult with a counselor for academic planning to specify university.

Please consult with www.assist.org frequently to obtain current information.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete 60 units to include (1) ENGL 100 and ENGL 102 or ENGL 103; (2) 12 additional units in English courses selected from ENGL 221A, 221B, 222, 225, 226, 227, 228, 230A, 230B, 232, 233, 234, 235, 246A, 246B, 248A, 248B, and (3) the Associate in Arts Degree general education requirements.

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 Reading in the Novel 3
- ENGL 234 Reading in Short fiction 3
- ENGL 235 Reading 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.”

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

CAREER OPPORTUNITIES:

- 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

| A&P 120 Introduction to Human Anatomy and Physiology | 4 |
| A&P 150 Introduction to Human Anatomy | 4 |
| A&P 200 Human Anatomy | 5 |
| A&P 151 Introduction to Human Physiology | 4 |
| A&P 201 Human Physiology | 5 |
| PSYC 101 General Introductory Psychology | 3 |
| SOC 101 Introductory Sociology Principles | 3 |
| or ANTH 100 Cultural Anthropology | 3 |
| CD 110 Child Development | 3 |
| CDIT 151 Infant and Toddler Development | 3 |
| and CDIT 152 Infant and Toddler Program | 3 |
| HO 152 Normal & Therapeutic Nutrition | 3 |

Plus 9 units of CSLUB advisor approved electives.

Consumer Affairs Option

| ACCT 101 Fundamentals of Accounting I | 4 |
| ECON 201 Principles of Macroeconomics | 3 |
| ECON 202 Principles of Microeconomics | 3 |
| PSYC 101 General Introductory Psychology | 3 |
| SOC 101 Introductory Sociology Principles | 3 |
| MATH 112 Elementary Statistics | 4 |
| or PSYC 210 Elementary Statistics | 4 |

Plus 9 units of CSLUB advisor approved electives.

Family and Consumer Sciences Education Option

| CHEM 100 Introductory Chemistry | 4 |
| PSYC 101 General Introductory Psychology | 3 |
| SOC 101 Introductory Sociology Principles | 3 |
| or ANTH 100 Cultural Anthropology | 3 |
| SPCH 130 Fundamentals of Speaking | 3 |

| 119 |
### Fashion Design, Manufacturing and Merchandising concentration:

12 units are required from a selection of lower and upper division courses

#### Family Life Education Option

- ANTH 100 Cultural Anthropology 3
- or SOC 101 Introductory Sociology Principles (3)
- A&P 120 Introduction to Human Anatomy and Physiology 4
- or A&P 151 Introduction to Human Physiology (4)
- or A&P 201 Human Physiology (5)
- PSYC 101 General Introductory Psychology 3
- CD 110 Child Development 3
- HO 152 Normal and Therapeutic Nutrition 3

**Plus 9 units of CSLUB advisor approved electives.**

### Fashion Merchandise Option

- ACCT 101 Fundamentals of Accounting I 4
- CHEM 100 Introductory Chemistry 4
- or CHEM 111 General Chemistry (5)
- ECON 201 Principles 3
- 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

**Plus 9 units of CSLUB advisor approved electives.**

### Textiles and Clothing Option

- CHEM 100 Introductory Chemistry 4
- or CHEM 111 General Chemistry (5)
- ECON 201 Principles of Macroeconomics 3
- ECON 202 Principles of Microeconomics 3
- HIST 241 Western Civilization 3
- 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
- CIS 101 Introduction to Computer Information 3

**Textiles and Clothing Option**

### BACHELOR OF SCIENCE IN DIETETICS AND FOOD ADMINISTRATION

#### Food Science Option

- A&P 151 Introduction to Human Physiology 4
- or A&P 201 Human Physiology (5)
- CHEM 111 General Chemistry 5
- HO 152 Normal and Therapeutic Nutrition 5
- MATH 116 Calculus for Managerial, Biological and Social Sciences 4
- MICRO 200 Principles and Applications of Microbiology 5

**BACHELOR OF SCIENCE IN DIETETICS AND FOOD ADMINISTRATION**

### Nutrition and Dietetics Option

- A&P 151 Introduction to Human Physiology 4
- or A&P 201 Human Physiology (5)
- CA 101 Introduction to Food Service, Safety & Sanitation 1
- CHEM 111 General Chemistry 5
- CIS 101 Introduction to Computer Information Systems 3
- ENGL 100 Freshman Composition 4
- HO 152 Normal and Therapeutic Nutrition 3
- MICRO 200 Principles and Applications of Microbiology 5
- PSYC 101 General Introduction Psychology 3
- SOC 101 Introductory Sociology Principles 3
- SPCH 100 Fundamentals of Oral Communication 3
- or SPCH 120 Fundamental of Interpersonal Communication (3)

**Nutrition and Dietetics Option**

### Forestry

#### Career Opportunities:

- Timber Companies
- Utility Companies
- U.S. Forest Service
- National Park Service
- Bureau of Land Management
- Environment Protection Agency
- California Division of Forestry
TRANSFER MAJOR REQUIREMENTS

LOWER DIVISION MAJOR PREPARATION

Typically requires at least one semester of general biology, one semester of elementary chemistry, and one semester of either math or business calculus. Major and Major Requirements, may differ from the ones cited here. For exact course requirements, please consult the appropriate major and university at http://www.assist.org

FRENCH

CAREER OPPORTUNITIES:

Government
International Firms
Airline Hostess
Travel Agent
Librarian
Linguistic Reporter
Teacher
Interpreter
Translator

TRANSFER MAJOR REQUIREMENTS

LOWER DIVISION MAJOR PREPARATION

for specific transfer institutions

California State University – Fullerton

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 102</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 201</td>
<td>Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 202</td>
<td>Intermediate French</td>
<td>4</td>
</tr>
<tr>
<td>FREN 203</td>
<td>Intermediate French, Advanced Level</td>
<td>4</td>
</tr>
</tbody>
</table>

California State University – Los Angeles

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 102</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 201</td>
<td>Intermediate French</td>
<td>5</td>
</tr>
<tr>
<td>and FREN 202</td>
<td>Intermediate French</td>
<td>4</td>
</tr>
<tr>
<td>FREN 281</td>
<td>Beginning Conversational French</td>
<td>3</td>
</tr>
</tbody>
</table>

Students are advised to take ENGL 103 as their CSUGE critical thinking requirement. This will also meet a graduation requirement at CSULA as the prerequisite for their writing proficiency requirement.

California State University – Long Beach

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 102</td>
<td>Elementary French</td>
<td>5</td>
</tr>
<tr>
<td>FREN 281</td>
<td>Beginning Conversational French</td>
<td>3</td>
</tr>
</tbody>
</table>

Students who have completed sufficient high school French may take upper division courses as soon as lower division requirements have been met.

Two years of a second foreign language at the college level or equivalent is also required.

Departmental Recommendation: Students specializing in French are recommended to include the following courses in their program of study: HIST 241 and HIST 242.

University of California – Irvine

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

FREN 101  Elementary French  5
and FREN 102  Elementary French  5
FREN 201  Intermediate French  5
and FREN 202  Intermediate French  4

At least one course is required from four different areas (writing, literature, history, and philosophy). An approved list of courses is available on www.assist.org. Please consult a counselor, if necessary, for these additional classes.

University of California – Los Angeles

Two years of French and one French literature course is required. Students in Plan III must also complete an introduction to linguistics course.

For information regarding preparation for this major visit www.french.ucla.edu/Major Requirements/undergraduate_prog.htm. Also, see a counselor for specific information.

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

Transfer students who have taken a college-level language course cannot take the placement exam and should consult with their advisors. No college-level Pass 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.

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 A.A. Degree general education requirements, and (3) take electives to achieve a minimum of 60 units.

GEOGRAPHY

CAREER OPPORTUNITIES:

Government
Industry
Teaching

TRANSFER MAJOR REQUIREMENTS

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>GEOG 101</td>
<td>Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>Cultural Geography</td>
<td>3</td>
</tr>
</tbody>
</table>

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Fullerton

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 105</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
</tbody>
</table>
**California State University – Long Beach**

GEOG 102  
Cultural Geography  
3  

or  
GEOG 105  
World Regional Geography  
3

**California State University – Los Angeles**

ENGL 103*  
Critical and Argumentative Writing  
3

Select from following options: Geographic Information Systems which also requires Math 140; General, or Urban Analysis.

* 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 101+  
Physical 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 for the 18 units minimum and all A.A. degree general education requirements for a total of at least 60 units.

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

See Cerritos College Graduation Requirements.  
See Plan A,B or C General Education Major Requirements.

**GEODESICS**

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS**

(1) Complete the 3 core courses listed below and any combination of the additional courses for a total of at least 18 units, (2) complete the A.A. Degree general education requirements and other courses to achieve a minimum of 60 units. *Math 112; Elementary Statistics, will fulfill G.E. transfer math requirements for CSU and UC system schools and is highly recommended.

**REQUIRED COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 101</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL DEGREE REQUIREMENTS**

18

**ADDITIONAL COURSES***

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 101L</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 103</td>
<td>3</td>
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<tr>
<td>ESCI 104</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 106</td>
<td>3</td>
</tr>
<tr>
<td>HIST 120</td>
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</tr>
<tr>
<td>ANTH 201</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL DEGREE REQUIREMENTS**

18

**GEOLOGY**

**CAREER OPPORTUNITIES:**

Government  
Industry - Petroleum  
Teaching  
Earthquake Research

**TRANSFER MAJOR REQUIREMENTS**

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>4</td>
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</tbody>
</table>

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

**California State University – Dominguez Hills**

**Earth Science Option:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 201</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 102</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 200</td>
<td>(5)</td>
</tr>
<tr>
<td>and BIOL 201</td>
<td>(5)</td>
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</tbody>
</table>

**Geology Option:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>GEOL 201</td>
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</tr>
<tr>
<td>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>
<tr>
<td>and PHYS 203</td>
<td>(4)</td>
</tr>
<tr>
<td>MATH 116</td>
<td>4</td>
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<tr>
<td>or MATH 170</td>
<td>(4)</td>
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<tr>
<td>and MATH 190</td>
<td>(4)</td>
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</table>

Engineering Physics articulation approved as a sequence only.

**Physical Science Option:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 201</td>
<td>4</td>
</tr>
<tr>
<td>MATH 170</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 202</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 203</td>
<td>4</td>
</tr>
</tbody>
</table>

Engineering Physics articulation approved as a sequence only.

**California State University – Fullerton (Geological Science)**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 201</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 120</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 200</td>
<td>(5)</td>
</tr>
<tr>
<td>MATH 170</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190</td>
<td>4</td>
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<td>PHYS 201</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 202</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 203</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 101</td>
<td>(4)</td>
</tr>
<tr>
<td>and PHYS 102</td>
<td>(4)</td>
</tr>
</tbody>
</table>
One additional course (with approval of CSUF advisor):

**Lower Division Selection**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 120</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Analytical 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>

**California State University – Long Beach**

- GEO 101 Physical Geology | 4
- or ESCI 110 Introduction to Earth Science (4)
- GEO 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 courses 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

Only courses in the major with a grade of “C” or higher are Passed toward the major.

**California State University Polytechnic – 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**

<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>
</tbody>
</table>

**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

**Additional Courses for options:**

**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

**University of California – Riverside**

- Requirements for general Geology, Geobiology, and Geophysics, Global Climate

**Change 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

**Additional Courses for options:**

**Geobiology Option:**

- BIOL 200 Principles of Biology | 5
- or BOT 120 Introduction to Plant Science (4)
- and ZOOL 120 Introduction to Animal Biology (4)
- BIOL 201 Principles of Biology | 5
- BOT 120 Introduction to Plant Science | 4
- ZOOL 120 Introduction to Animal Biology | 4

**Geophysics option:**

- MATH 240 Calculus and Differential Equations | 4

**Global Climate Change option:**

- ESCI 104 Oceanography | 3
- BIOL 200 Principles of Biology | 5
- or BOT 120 Introduction to Plant Science (4)
- and ZOOL 120 Introduction to Animal Biology (4)
- BIOL 201 Principles of Biology | 5
- 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.
GEOLOGY

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

(1) Complete the 6 core courses listed below for a total of 25 units, (2) complete the A.A. Degree general education requirements and other courses to achieve a minimum of 60 units. Students are encouraged to take courses from the additional courses category in order to broaden their Geology A.A. Degree.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
</tr>
<tr>
<td>GEOL 201</td>
<td>Earth History</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
</tr>
<tr>
<td>PHYS 100</td>
<td>Elementary Physics</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
</tr>
</tbody>
</table>

TOTAL 25

ADDITIONAL COURSES*

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 204</td>
<td>Geology of the Western National Parks and Monuments</td>
</tr>
<tr>
<td>GEOL 207</td>
<td>Paleontology, Life of the Past</td>
</tr>
<tr>
<td>GEOL 209</td>
<td>Natural Disasters</td>
</tr>
</tbody>
</table>

GERMAN

CAREER OPPORTUNITIES:

- U.S. or International Agencies
- International Business Firms
- Airline Hostess
- Travel Agency Personnel
- Librarian
- Linguistic Reporter
- Teacher
- Interpreter
- Translator

TRANSFER MAJOR REQUIREMENTS

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

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

California State University – Long Beach

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 101</td>
<td>Elementary German</td>
</tr>
<tr>
<td>GERM 102</td>
<td>Elementary German</td>
</tr>
<tr>
<td>GERM 201</td>
<td>Intermediate German</td>
</tr>
<tr>
<td>GERM 202</td>
<td>Intermediate German</td>
</tr>
</tbody>
</table>

University of California – Irvine

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

GERM 101 Elementary German 5
and GERM 102 Elementary German 5
GERM 201 Intermediate German 4
and GERM 202 Intermediate German 4

At least one course from each of four areas (writing, literature, history, and philosophy) is also required. An approved list of courses is available from www.assist.org.

Please consult a counselor, if necessary, for these additional classes.

University of California – 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.

Transfer students who have taken a college-level language course cannot take the placement examination and should consult with their advisors. No college-level Pass 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 A.A. Degree general education requirements, and (3) take electives to achieve the minimum of 60 units.

GLOBAL STUDIES

CAREER OPPORTUNITIES:

- Foreign and Government Service
- Tourism
- Public Relations
- Business
- Law

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

CORE REQUIREMENTS (15 UNITS)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>World Regional Geography</td>
</tr>
<tr>
<td>HIST 275</td>
<td>Global Studies</td>
</tr>
<tr>
<td>POL 210</td>
<td>International Relations</td>
</tr>
</tbody>
</table>
Division Requirements – Choose one option (9 units)
Political-Economic Option – Select three courses
ECON 102 Women in the Global Economy 3
HIST 246 World Civilization 3
POL 220 Comparative Government 3
POL 230 Contemporary Political Issues: Middle East 3
BA 101 International Business 3

Socio-Cultural Option: Select three courses
PHIL 200 World Religions 3
HUM 100 The Art of Being Human 3
ANTH 170 Introduction to Language and Culture 3
SOC 215 Sociology of Cultural Diversity 3
SPCH 110 Intercultural Communication 3

NOTE: One year of Foreign Language study is recommended.

CERTIFICATE OF ACHIEVEMENT
CORE REQUIREMENTS (15 UNITS)
DIVISION OPTION REQUIREMENTS (SELECT 1) 9 UNITS
TOTAL CERTIFICATE UNITS 24 UNITS

GLOBAL RESOURCES
CERTIFICATE OF ACHIEVEMENT
CORE REQUIREMENTS (CERTIFICATE OF COMPLETION) UNITS
GEOG 105 World Regional Geography 3
POL 210 International Relations 3
BA 101 International Business 3

AND ONE OF THE FOLLOWING
PHIL 200 World Religions 3
ANTH 100 Cultural Anthropology 3

Division Requirements
ENGL 106 Introduction to Language Study 3
ESCI 101 Physical Ecology 3

SELECT 6 UNITS FROM THE FOLLOWING:
GEOG 101 Physical Geography 3
GEOG 102 Natural and Cultural Geography 3
GEOL 101 Physical Geology 3
GEOL 110 Introduction to Geology 3
ESCI 102 Physical Ecology Field Laboratory 1
ESCI 104 Oceanography 3

TOTAL CERTIFICATE REQUIREMENTS: 24

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

CONTEMPORARY WORLD CULTURES
CERTIFICATE OF ACHIEVEMENT
CORE REQUIREMENTS UNITS
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 Religions 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.

HISTORY

CAREER OPPORTUNITIES:
Teaching
Law
Government
Public Service

TRANSFER MAJOR REQUIREMENTS
COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA

UNITS
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
Curriculum and Requirements for Majors, Certificates and Transfer Programs

and HIST 101 American History and Constitution 3
HIST 245 World Civilization from Antiquity to 1500 3

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
or HIST 241 Western Civilization 3
and HIST 242 Western Civilization 3

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

See a counselor for Teacher Preparation Option

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 210 History of the United States in the Post World War II Era 3
HIST 120 History of California 3
HIST 204 Women in American History 3
HIST 220 History of the Americas 3
HIST 221 History of the Americas 3
HIST 230 History of Mexico 3
HIST 235 History of Latin America 3
HIST 250 History of England, Great Britain and the Commonwealth 3
HIST 255 History of Russia and the Soviet Union 3
HIST 260 Survey of the History of Asia 3
HIST 265 Selected Problems in Contemporary Asian History 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 units minimum and all AA degree general education requirements for a total of at least 60 units.

INDUSTRIAL TECHNOLOGY

CAREER OPPORTUNITIES:
Architect
Civil Engineer
Mechanical Engineer
Electrical Engineer
Estimator
Scheduler

INDUSTRIAL ARTS EDUCATION

TRANSFER MAJOR REQUIREMENTS

COMMON LOWER DIVISION REQUIREMENTS

California State University - Los Angeles
AUTO 100 Automotive Maintenance and Operation 4
EL 110 Principles of DC Electronics 3
EL 110L DC Electronics Laboratory 1
ENGT 131 Design Fundamentals Including AutoCAD 3
ENGT 257 AutoDesk Inventor 4
ENGT 258 Design and Production Technology with AutoCAD 4

UNITS
MTT 100 Machine Tool Introduction 2
or WELD 100 Welding Fundamentals 2.5
PHOT 100 Introductory Photography 3
WMT 101 Introduction to Woodworking 3

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.

The Industrial Technology Program prepares graduates for careers in industry and education. The Industrial career at CSULA Track emphasizes preparation for technical leadership responsibilities within a broad variety of industries including Aerospace, Communication, Manufacturing, Transportation and Utility Services. The areas of course concentration are Computer Integrated Design, Internetworking, Graphic Communications, Manufacturing processes and Automation and Power/Energy/Transportation. Instruction includes laboratory experiences with a project design centered approach. Graduates of Major Requirements in Industrial Technology are called “Technologists” to distinguish them from graduates of Major Requirements in Engineering. Technologies apply Management Theory and practice with technical skills to solve problems.

The Technology Education Career Track offers preparation for the Single Subject Teaching Credential (offered through the Charter College of Education) in Industrial Technology education. 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.

CONSTRUCTION OPTION
TRANSFER MAJOR REQUIREMENTS
COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

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

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 Physical Geology 4
LAW 111 Business Law 3
MATH 114 College Algebra 4
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and 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.

ELECTRONICS OPTION
TRANSFER MAJOR REQUIREMENTS
COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY (ENGINEERING TECHNOLOGY)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>Macroeconomics</td>
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<tr>
<td>EL 110</td>
<td>Principles of DC Electronics</td>
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<td>EL 110L</td>
<td>DC Electronics Laboratory</td>
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<tr>
<td>EL 120</td>
<td>Principles of AC Electronics</td>
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<tr>
<td>EL 120L</td>
<td>AC Electronics Laboratory</td>
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<tr>
<td>EL 134</td>
<td>Digital Circuits and Computer Logic</td>
<td>3</td>
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<tr>
<td>EL 134L</td>
<td>Digital Circuits and Computer Logic</td>
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</tr>
<tr>
<td>MATH 150</td>
<td>Precalculus 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
CIS 101 Introduction to Computer Information Systems 3
CIS 280 Object-Oriented Programming in C++ 3
EL 200 Semi-Conductor Circuits 3
EL 200L Semi-Conductor Circuits 1
ENG 131 Design Fundamentals Including AutoCAD 3
MATH 112 Elementary Statistics 4
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
### 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 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CIS 230</td>
<td>Assembly Programming for Microcomputers</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 235</td>
<td>Statics</td>
<td>3</td>
</tr>
</tbody>
</table>

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.

### MANUFACTURING OPTION

#### TRANSFER MAJOR REQUIREMENTS

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

<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>ECON 201</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 131</td>
<td>Design Fundamentals 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>
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<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>4</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>
<td>3</td>
</tr>
<tr>
<td>ENGT 258</td>
<td>Design and Production Technology with AutoCAD</td>
<td>4</td>
</tr>
<tr>
<td>LAW111</td>
<td>Business Law</td>
<td>3</td>
</tr>
</tbody>
</table>

#### MTT 100 | Machine Tool Introduction          | 2     |
#### MATH 112 | Elementary Statistics            | 4     |
#### MATH 170 | Analytic Geometry and Calculus I  | 4     |
#### MATH 190 | Analytic Geometry and Calculus II | 4     |
#### or PSYC 210 | Elementary Statistics    | (4)   |

### California State Polytechnic University – Pomona

(GENERAL)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>WELD 100</td>
<td>Welding Fundamentals</td>
<td>2.5</td>
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</tbody>
</table>

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.

### QUALITY ASSURANCE

#### CAREER PATHWAY

(The following curriculum does not lead to an Associate in Arts Degree)

The following programs of study has been designed to prepare students for transfer to California State University, Long Beach – Engineering Technology.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>
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<td>Macroeconomics</td>
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</tr>
<tr>
<td>ENGT 131</td>
<td>Design Fundamentals Including 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>
<td>(3)</td>
</tr>
<tr>
<td>LAW 111</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Pre-Calculus 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>PHIL 106</td>
<td>Introduction to Logic</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>
</tbody>
</table>

#### Quality Control Courses

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

### INSURANCE – PROPERTY AND CASUALTY

#### CAREER OPPORTUNITIES:

- Auto Insurance Agent
- Business Insurance Agent
- Health Insurance Agent
- Life Insurance Agent
- Real Estate Insurance Agent

#### CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSR 101</td>
<td>Introduction to Insurance</td>
<td>1</td>
</tr>
<tr>
<td>INSR 102</td>
<td>Insurance Code and Ethics</td>
<td>1</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>INSR 121</td>
<td>Insurance Principles: Property and Liability</td>
<td>3</td>
</tr>
<tr>
<td>INSR 122</td>
<td>Personal Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 123</td>
<td>Commercial Insurance</td>
<td>3</td>
</tr>
<tr>
<td>INSR 171</td>
<td>Insurance Occupational Work Experience</td>
<td>1</td>
</tr>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 113</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>or LAW 111</td>
<td>Business Law</td>
<td>(3)</td>
</tr>
<tr>
<td>BA 156</td>
<td>Motivational Presentation Skills for Managers</td>
<td>3</td>
</tr>
<tr>
<td>or BCOM 147</td>
<td>Business Communications</td>
<td></td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 133</td>
<td>Spreadsheet Accounting I</td>
<td>3.5</td>
</tr>
<tr>
<td>CIS 101</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS:** 31.5

---

## INTERPRETING/TRANSLATING

**CAREER OPPORTUNITIES:**
- Interpreter
- Translator
- Teacher
- Legal Assistant

### CERTIFICATE OF ACHIEVEMENT

**CORE REQUIREMENTS (CERTIFICATE OF COMPLETION) UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</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 Code</th>
<th>Course Title</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 Code</th>
<th>Course Title</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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 282</td>
<td>Intermediate Conversational Spanish</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 283</td>
<td>Advanced Conversational Spanish</td>
<td>3</td>
</tr>
<tr>
<td>FREN 202</td>
<td>Intermediate French</td>
<td>4</td>
</tr>
<tr>
<td>FREN 203</td>
<td>Intermediate French Advanced Level I</td>
<td>4</td>
</tr>
<tr>
<td>GERM 203</td>
<td>Scientific German</td>
<td>4</td>
</tr>
<tr>
<td>GERM 204</td>
<td>Scientific German</td>
<td>4</td>
</tr>
<tr>
<td>JAPN 102</td>
<td>Elementary Japanese</td>
<td>5</td>
</tr>
<tr>
<td>JAPN 201</td>
<td>Intermediate Japanese</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 201</td>
<td>Intermediate Spanish</td>
<td>5</td>
</tr>
<tr>
<td>and SPAN 202</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
<tr>
<td>or SPAN 112</td>
<td>Elementary Spanish for Spanish Speakers</td>
<td>(5)</td>
</tr>
<tr>
<td>and SPAN 202</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
<tr>
<td>or SPAN 213</td>
<td>Living Spanish Grammar and Written Communication</td>
<td>(2)</td>
</tr>
<tr>
<td>SPAN 214</td>
<td>Living Spanish Grammar and Written Communication</td>
<td>(2)</td>
</tr>
<tr>
<td>and SPAN 202</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
</tbody>
</table>

**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.

---

## 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.

---

### LAW (PARALEGAL)

**CAREER OPPORTUNITIES:**
- Escrow Secretary
- File Clerk
- Insurance Clerk
- Legal Assistant
- Paralegal
- Legal Secretary

**ASSOCIATE IN ARTS DEGREE**

**SECTION A - LEGAL PARALEGAL PROGRAM CORE REQUIREMENTS FOR BOTH AA AND CERTIFICATE CANDIDATES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>
</tr>
<tr>
<td>LAW 290</td>
<td>Capstone Course-Paralegal Program</td>
<td>1</td>
</tr>
</tbody>
</table>

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

### SECTION B

AA Degree Candidates must Complete Above 28 units and an additional 5 units from these courses for a total of 33.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>
</tr>
<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 119</td>
<td>Legal Aspects of Mass Communications</td>
<td>1</td>
</tr>
<tr>
<td>LAW 171-172</td>
<td>Legal Occupational Work Experience</td>
<td>(1-4)</td>
</tr>
<tr>
<td>RE 125</td>
<td>Legal Aspects of Real Estate</td>
<td>3</td>
</tr>
</tbody>
</table>

Certificate Candidates must complete a total of 28 units.

AA Degree Candidates must complete a total of 33 units.
NOTE: DEPARTMENT RECOMMENDATION: It is strongly recommended that all graduates who wish to be assisted with job placement through the Law Department complete LAW 171 through LAW 174 Work Experience with a letter of recommendation from their employer.

General education requirements must also be completed to achieve a minimum of 60 units for an AA Degree in Paralegal. 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 SPECIALTIES**

**COMMERCIAL (LAW)**
- LAW 106 Bankruptcy Law 3
- LAW 220 Landlord and Tenant Law 3
- LAW 230 Corporate Law 3
- or LAW 110 Business Law 3

**PROBATE & ESTATE PLANNING**
- LAW 107 Probate Procedures 3
- LAW 112 Estate Planning for the Paralegal 3
- LAW 115 Elder Law 3

**LITIGATION**
- LAW 102 Advanced California Civil Procedures 3
- LAW 104 Advanced Legal Research 3
- LAW 109 Torts and Personal Injury Law and Procedures 3

**FAMILY LAW**
- LAW 102 Advanced California Civil Procedures 3
- or LAW 113 Fundamentals of Alternate Dispute Resolutions 3
- LAW 104 Advanced Legal Research 3
- LAW 108 Family Law Procedures 3

**CRIMINAL LAW**
- LAW 116 Criminal Law 3
- LAW 104 Advanced Legal Research 3
- LAW 102 Advanced California Civil Procedures 3
- or LAW 113 Fundamentals of Alternate Dispute Resolutions 3

**LEGAL TECHNOLOGY**
- LAW 52 Law Office Management 3
- LAW 57 Legal Document Production 3
- LAW 65 Advanced Legal Technology 3

**BUSINESS LAW**
- LAW 110 Business Law 3
- LAW 111 Business Law 3
- LAW 113 Fundamentals of Alternate dispute Resolutions 3

**PARALEGAL CERTIFICATE:**
A student may earn a Paralegal Certificate if the student has already completed an AA degree or BA degree or prior to taking any courses applied to the Paralegal Certificate. These units must include LAW 56, LAW 100, LAW 101, LAW 103, LAW 111, LAW 120, LAW 290 and the students may choose either LAW 102, or LAW 113. Any additional units needed to complete the 28 units required may be taken from Section B with an asterisk. All 27 units must be taken at Cerritos College.

Students must consult with the Law or Counseling Department prior to entering the certificate program to verify eligibility. 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.

**LEGAL MINOR**

**VERIFICATION OF COMPLETION (9 UNITS)**
The Legal Minor may be obtained by completing three of the following core courses with a grade of Pass 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 you major provides legal knowledge essential in business, private industry, and self-employment.

*This minor does not prepare students for a career as a paralegal. This minor is not approved by the American Bar Association.

**LIBERAL ARTS AND SCIENCES**
The Liberal Arts and Sciences degree is designed to give students a foundational degree that may either be used as a basis for transfer to a four-year college or university, or to serve those students who wish to enter the workforce prepared with an associate degree. Students wishing to transfer must select General Education Plan B for transfer to a California State University or Plan C for transfer to either a California State University or a University of California. Students planning this degree as preparation for the work force may select Plan A. See the General Education section of this Catalog for details. Meeting with a college counselor is highly recommended to prepare for completion of the degree.

In order to qualify for an A.A. degree in Liberal Arts and Sciences, the following requirements must be met:

1. Completion of Plan A, B, or C of the General Education requirements and meet required proficiencies. These requirements and proficiencies are specified in the Associate in Arts Degree General Education Requirements of the Catalog.
2. Completion of a minimum of 60 degree-applicable units.
3. Completion of at least one area of emphasis among the following with a grade of Pass or “C” or higher in each course:
   - Art and Culture (21 units)
   - Communication (18 units)
   - Culture and Society (18 units)
   - Earth and Space Sciences (18 units)
   - Historical Perspectives (18 units)
   - Literature and Language (18 Units)
   - Media Studies (18 units)
   - Self-Development and Social Behavior (18 units)
   - Social and Behavioral Sciences (18 units)
   - Visual Communication (18 units)

4. Courses may be used to satisfy both a general education requirement and a major or area of emphasis requirement. Whether it may be counted again for a different degree requirement is up to each transfer institution.

5. Repeatable courses may be counted toward an area of emphasis only once.

6. Courses that appear in more than one section of an area of emphasis may be applied only once in meeting the requirements for that area of emphasis.

ART AND CULTURE

Students will begin with an overview of world art history, focusing on patterns within patterns within development of human cultural production. They will take a series of courses designed to introduce them to both Western and Non-Western artistic traditions in the visual, literary, and performing arts. They will complete their studies with advanced courses aimed at developing critical analytical skills as they relate to issues of identity and politics within the arts. Finally, they will choose from electives to broaden their understanding to art and culture today.

This area of emphasis will prepare students for possible baccalaureate degree majors within the fields of art history, arts and humanities, art criticism, theater, and dance.

Students pursuing these studies may seek careers in museum work, allied arts, art foundations, art criticism, theater, and the entertainment industry.

Section One — Required courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 100</td>
<td>Introduction to World Art</td>
<td>3</td>
</tr>
<tr>
<td>HUM 100</td>
<td>The Art of Being Human</td>
<td>3</td>
</tr>
<tr>
<td>ART 108</td>
<td>Black Images in Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>or HUM 108</td>
<td>Black Images in Pop Culture</td>
<td>(3)</td>
</tr>
<tr>
<td>or ART 109</td>
<td>Gender and Sexuality in Art</td>
<td>(3)</td>
</tr>
<tr>
<td>or HUM 109</td>
<td>Gender and Sexuality in Art</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Section Two — Western Art History

Choose 3 units from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Art History 1: Prehistory to Gothic</td>
<td>3</td>
</tr>
<tr>
<td>ART 102</td>
<td>Art History 2: Renaissance to Rococo</td>
<td>3</td>
</tr>
<tr>
<td>ART 103</td>
<td>Art History 3: Neoclassical to Present</td>
<td>3</td>
</tr>
</tbody>
</table>

Section Three — Non-Western Art History

Select 3 units from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 104</td>
<td>African Art History</td>
<td>3</td>
</tr>
<tr>
<td>ART 105A</td>
<td>The Arts of Latin America and the Caribbean: Pre-Columbian</td>
<td>3</td>
</tr>
<tr>
<td>ART 105B</td>
<td>The Arts of Latin America and the Caribbean: Colonial to Present</td>
<td>3</td>
</tr>
<tr>
<td>ART 107</td>
<td>Asian Art</td>
<td>3</td>
</tr>
</tbody>
</table>

Section Four — Literary and Performing Arts

Select 3 units from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 232</td>
<td>Readings in Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 235</td>
<td>Readings in the Drama</td>
<td>3</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 101</td>
<td>World Music</td>
<td>3</td>
</tr>
<tr>
<td>TH 159</td>
<td>World Film</td>
<td>3</td>
</tr>
</tbody>
</table>

Section Five — Art and Culture Electives

Select 3 units from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 112</td>
<td>History of Architecture</td>
<td>3†</td>
</tr>
<tr>
<td>DANC 100</td>
<td>Dance Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>DANC 101</td>
<td>History of Dance</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 140</td>
<td>Oral Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 145</td>
<td>Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 240</td>
<td>Oral Interpretation: Reader’s Theater</td>
<td>3</td>
</tr>
<tr>
<td>TH 101</td>
<td>Introduction to Theater</td>
<td>3</td>
</tr>
<tr>
<td>TH 104</td>
<td>History and Appreciation of Musical Theater</td>
<td>3</td>
</tr>
<tr>
<td>TH 110</td>
<td>Introduction to Acting</td>
<td>3</td>
</tr>
</tbody>
</table>

† UC credit limits may apply. Please see list of UC transferable courses in ASSIST (http://www.assist.org) or a counselor for explanation.

Total Units Arts and Culture Area of Emphasis 21

COMMUNICATION

The Communication Area of Emphasis is designed to give the student both foundational and proficient knowledge and skill to communicate effectively in today’s world. Students will apply principles of language for clear, concise expression and logical thought. The emphasis begins with courses in oral communication, reading, and written communication. The next level of courses uses these communication methods to express complex concepts and critical opinions in the education as well as the vocational setting.

This area of emphasis will prepare students for possible baccalaureate degree majors in communication, communication studies, public speaking, philosophy, and education.

Students pursuing these studies may seek careers in politics, public policy, education, law, and business.

Courses that appear in more than one section of an area of emphasis may be applied only once in meeting the requirements for that area of emphasis.
Section 1 — Communication Courses
Select 6 units from the following courses:

SPCH 100 Fundamentals of Oral Communication 3†
or SPCH 130 Fundamentals of Speaking (3)
SPCH 110 Intercultural Communication 3
or SPCH 150 Organizational Communication (3)

Section 2 — Critical Thinking Courses
Select 3 units from the following courses:

ENGL 101 Critical Thinking Through Literature 3
ENGL 103 Critical and Argumentative Writing 3
PHIL 103 Philosophical Reasoning – Critical Thinking in Philosophy 3
PHIL 106 Introduction to Logic 3
PSYC 103 Critical Thinking in Psychology 3
READ 200 Analysis and Critical Thinking 3
SPCH 235 Fundamentals of Argumentation and Persuasion 3
INST 100 Principles of Problem Solving 3

Section 3 — Additional Courses
Select at least 9 additional units from at least two disciplines from the following courses:

CG 150 Dynamics of Leadership 3
CG 200 Success in College and Career 3
ENGL 101 Critical Thinking Through Literature 3
ENGL 103 Critical and Argumentative Writing 3
INST 100 Principles of Problem Solving 3
LIB 100 Introduction to Library Resources 1
PHIL 103 Philosophical Reasoning – Critical Thinking in Philosophy 3
PHIL 106 Introduction to Logic 3
PSYC 103 Critical Thinking in Psychology 3
PSYC 220 Research Methods 3
READ 200 Analysis and Critical Thinking 3
SOC 205 Introduction to Social Science Research 3
SPCH 100 Fundamentals of Oral Communication 3†
SPCH 110 Intercultural Communication 3
SPCH 130 Fundamentals of Speaking 3
SPCH 150 Organizational Communication 3
SPCH 235 Fundamentals of Argumentation and Persuasion 3
SPCH 236 Forensics for One Tournament 1
SPCH 237 Forensics for Two Tournaments 1
SPCH 238 Forensics for Three Tournaments 1
SPCH 239 Forensic Workshop 2

Total Units Communication Area of Emphasis 18

† UC credit limits may apply. Please see list of UC transferable courses in ASSISt (http://www.assist.org) or a counselor for explanation.

CULTURE AND SOCIETY

Courses in culture and society are an inter-disciplinary activity, developing a global perspective of how western and non-western societies interconnect and interact, and the dynamics of cultural change. Students will develop a critical framework for a better understanding of diverse cultural and historic identities in societal contexts through the study of history, language, literature, sociology, art and art history, and other humanities and social sciences.

This area of emphasis will prepare students for possible baccalaureate degree majors in history, anthropology, international studies, global studies, political science, and literature.

Students pursuing these studies may seek careers in writing, teaching, business, foreign service, social service, law, museum direction, and travel and tourism.

Select at least 6 units from Section 1, at least 6 units from Section 2, at least 6 units from Section 3, and at least 3 units from Section 4 for a total of 21 units.

Courses that appear in more than one section of an area of emphasis may be applied only once in meeting the requirements for that area of emphasis.

Section 1 — World Societies
Select 6 units total from at least two disciplines:

ANTH 100 Cultural Anthropology 3
ANTH 170 Introduction to Language and Culture 3
ANTH 200 Native Peoples of North America 3
ANTH 201 Native Peoples of California 3
GEOG 102 Natural and Cultural Geography 3
HIST 120 History of California 3
HIST 204 Women in American History 3
or WS 204 Women in American History (3)
HIST 210 History of the United States in the Post World War II Era (1945-Present) 3
HUM 100 The Art of Being Human 3
PHIL 104 Philosophy of Cultural Diversity: Challenge and Change 3
PHIL 200 World Religions 3
PHIL 201 Introduction to Twentieth Century Philosophy 3
SOC 101 Introductory Sociology Principles 3
SOC 201 Social Problems 3
SOC 215 Sociology of Cultural Diversity: Challenge and Change 3
SPAN 206 Hispanic Literature in the Media 3
SPAN 210 Highlights of Hispanic Culture 3
SPCH 110 Intercultural Communication 3
WS 102 Women and Religion 3

Section 2 — The Arts
Select 6 units total from at least two disciplines:

ARCH 112 History of Architecture 3†
ART 100 Art History I: Pre-History to Gothic 3
ART 101 Art History 2: Renaissance to Rococo 3
ART 102 Art History 3: Neo-Classical to Present 3
ART 103 Modern and Contemporary Appreciation 3
ART 104 African Art History 3
ART 105A The Arts of Latin America and the Caribbean: Pre-Columbian 3
ART 105B The Arts of Latin America and the Caribbean: Colonial to Present 3
ART 107 Asian Art History 3
ENGL 228 Shakespeare’s Plays 3
ENGL 235 Readings in the Drama 3
MUS 101 Introduction to World Music 3
MUS 102 Latino Music 3
DANC 101 History of Dance 3
DANC 181   Introduction to Dance Cultures of the World 3
TH 102   History of the Classical Theatre 3
TH 103   History of the Modern Theatre 3
TH 159   World Film 3

Section 3 — World History and Political Institutions
Select 6 units total from at least two disciplines:

HIST 101   American History and Constitution 3†
HIST 102   Political Social History of the U.S.: 1500s to 1876 3†
HIST 103   Political and Social History of the U.S.: 1877 to Present 3†
HIST 110   African-American History 3
HIST 120   History of California 3
HIST 204   Women in American History 3
or WS 204   Women in American History (3)
HIST 210   History of the United States Post WWII: 1945 to Present 3†
HIST 220   History of the Americas 3
HIST 221   History of the Americas 3
HIST 230   History of Mexico 3
HIST 235   History of Latin America 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 the Present 3
HIST 250   History of England, Great Britain and the Commonwealth 3
HIST 255   History of Russia and the Soviet Union 3
HIST 260   Survey of the History of Asia 3
HIST 265   Selected Problems in Contemporary Asian History 3
JOUR 100   Mass Communications and Society 3
POL 101   American Political Institutions 3†
POL 201   Introduction to Political Science and American Government 3†
POL 210   International Relations 3
POL 220   Comparative Government 3
POL 230   Contemporary Political Issues: Middle East 3
SPAN 206   Hispanic Literature in the Media 3

Section 4 — World Literatures
Select 3 units from the following courses:

ENGL 221a   Literature in the Bible: Hebrew Scriptures 3
ENGL 221b   Literature in the Bible: Christian Scriptures 3
ENGL 223   Chicana/o Literature 3
ENGL 224   Native American Literature 3
ENGL 225   Mexican Literature in Translation 3
ENGL 226   African American Literature 3
ENGL 236   Studies in Women's Literature 3
ENGL 237   Asian American Literature 3
ENGL 238   Classical Islamic Literature 3
ENGL 246A   Survey of English Literature 3
ENGL 246B   Survey of English Literature 3
ENGL 248A   Masterpieces of World Literature 3
ENGL 248B   Masterpieces of World Literature 3
SPAN 206   Hispanic Literature in the Media 3

Total Units Culture and Society Area of Emphasis 21

† UC credit limits may apply. HIST 101, 101LC, 102, 102LC and 103 are combined: maximum credit, two courses. HIST 103 and 210 combined: maximum credit, one course. Please see list of UC transferable courses in ASSIST (http://www.assist.org) or a counselor for explanation.

EARTH AND SPACE SCIENCES

These courses emphasize the study of our home planet and its place in the universe, both present and past. Students will examine, explore, and synthesize theories relating to the origin and evolution of Earth, our solar system, and the universe in lecture and laboratory environments.

This area of emphasis will prepare students for possible baccalaureate degree majors in astronomy, earth sciences, geology, oceanography, global studies, environmental science and policy, astronomy and natural science.

Students pursuing these studies may seek careers in geology, oceanography, environmental analysis, science education, urban planning, policy administration, and consulting.

Complete at least seven units, including at least one laboratory from Section A; at least eight units, including one laboratory from Section B; at least three units from Section C; and additional units from any of the sections below for a combined total of 18.

Section A — Courses in Astronomy
Choose at least 7 units, including one laboratory, from the following courses:

ASTR 102   Introductory Astronomy: Stars and the Universe 3†
ASTR 103   Introductory Astronomy: The Solar System 3†
ASTR 105L   Observational Astronomy (lab) 1
ASTR 106   History of Astronomy 3

† UC credit limits may apply. ASTR 102 and ASTR 103 are combined: maximum credit, one course.

No credit for ASTR 102 or ASTR 103 if taken after ASTR 101.

Section B — Courses in Earth Sciences
Choose at least 8 units, including one laboratory, from the following courses:

ESCI 101   Physical Ecology 3
ESCI 102   Physical Ecology Field Laboratory (lab) 1
ESCI 104   Oceanography 3
ESCI 104L  Oceanography Laboratory (lab) 1
ESCI 106   Weather and Climate 3
GEOG 101   Physical Geography 3
GEOG 101L  Physical Geography Laboratory (lab) 1
GEOL 103   Environmental Geography 3
GEOL 101   Physical Geology (includes lab) 4†

† GEOL 101 meets the laboratory requirement for Section B.

Section C — Courses in Astronomy and Earth Sciences
Choose at least 3 units from the following courses:

ASTR 104   Life in the Universe 3
GEOL 201   Earth History 4
GEOL 204   Geology of the Western National Parks and Monuments 3
Select at least 6 units from the following courses:

ANTH 200 Native Peoples of North America 3
ANTH 201 Native Peoples of California 3
HIST 101 American History and Constitution 3†
HIST 102 Political and Social History of the United States: 1500s to 1876 3†
HIST 103 Political and Social History of the United States: 1877 to Present 3†
HIST 110 African-American History 3
HIST 120 History of California 3
HIST 204 Women in American History 3
or WS 204 Women in American History (3)
HIST 210 History of the United States in the Post World War II Era 3†

† UC credit limits may apply. HIST 101, 101LC, 102, 102LC and 103 are combined: maximum credit, two courses. HIST 103 and 210 combined: maximum credit, one course. Please see list of UC transferable courses in ASSIST (http://www.assist.org) or a counselor for explanation.

Total Units Historical Perspectives Area of Emphasis 18

Section 3 — History of the Arts and Sciences

Select at least 6 units from the following courses:

ART 101 Art History 1: Prehistory to Gothic 3
or ART 102 Art History 2: Renaissance to Rococo (3)
or ART 103 Art History 3: Neoclassical to Present (3)
ART 104 African Art History 3
ART 105A The Arts of Latin America and the Caribbean: Pre-Columbian 3
or ART 105B The Arts of Latin America and the Caribbean: Colonial to Present (3)
ART 107 Asian Art 3
ARCH 112 History of Architecture 3†
ASTR 106 History of Astronomy 3
DANC 101 History of Dance 3
MUS 104B History of Rock Music 3
PHOT 160 History of Photography 3
TH 102 History of the Classical Theater 3
or TH 103 History of the Modern Theater (3)
or TH 104 History and Appreciation of Musical Theater (3)

† UC credit limits may apply. Please see list of UC transferable courses in ASSIST (http://www.assist.org) or a counselor for explanation.

Total Units Historical Perspectives Area of Emphasis 18

Section 2 — World and Ethnic History

Select at least 6 units from the following courses:

ANTH 202 The Maya, Inca and Aztecs: Ancient Civilizations of The Americas 3
HIST 220 History of the Americas 3
or HIST 221 History of the Americas (3)
HIST 230 History of Mexico 3
or HIST 235 History of Latin America (3)
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)
HIST 250 History of England, Great Britain and the Commonwealth 3
or HIST 255 History of Russia and the Soviet Union (3)
or HIST 260 Survey of the History of Asia (3)
or HIST 265 Selected Problems in Contemporary Asian History (3)

Section 1

Select 3 units from one of the following:

ANTH 100 Cultural Anthropology 3
ENGL 101 Critical Thinking Through Literature 3
ENGL 106 Linguistics 3

Section 2

Select a minimum of 15 units from one or more of the following disciplines:

Art and Culture

ANTH 100 Cultural Anthropology 3
ART 108 Black Images in Popular Culture 3
or HUM 108 Black Images in Popular Culture (3)
Curriculum and Requirements for Majors, Certificates and Transfer Programs

ART 109 Gender and Sexuality in Art 3
or HUM 109 Gender and Sexuality in Art (3)
SPAN 206 Hispanic Literature in the Media 3
SPAN 210 Highlights of Hispanic Culture 3
SPAN 245 Intro to Chicano/Mexican American Culture 3
SPCH 240 Oral Interpretation: Readers’ Theatre 3
TH 159 World Film 3

**English**
ENGL 221A Literature in the Bible: Hebrew Scriptures 3
ENGL 221B Literature in the Bible: Christian Scriptures 3
ENGL 223 Chicano/a Literature 3
ENGL 224 Native American Literature 3
ENGL 225 Mexican Literature in Translation 3
ENGL 227 Current Literature 3
ENGL 228 Shakespeare’s Plays 3
ENGL 230A Introduction to American Literature 3
ENGL 230B Introduction to American Literature 3
ENGL 232 Readings in Poetry 3
ENGL 233 Readings in the Novel 3
ENGL 234 Readings in Short Fiction 3
ENGL 238 Classic Islamic Literature 3
ENGL 235 Readings in the Drama 3
ENGL 240 Creative Writing 3
ENGL 241 Screenwriting 3
or TH 241 Screenwriting 3
ENGL 246A Survey of English Literature 3
ENGL 246B Survey of English Literature 3
ENGL 248A Masterpieces of World Literature 3
ENGL 248B Masterpieces of World Literature 3

**Chinese**
CHIN 101 Elementary Chinese 5

**French**
FREN 101 Elementary French 5
FREN 102 Elementary French 5
FREN 201 Intermediate French 5
FREN 202 Intermediate French 4
FREN 203 Intermediate French Advanced Level 1 4
FREN 281 Beginning Conversational French 3
FREN 282 Intermediate Conversational French 3
FREN 283 Advanced Conversational French 3

**German**
GERM 101 Elementary German 5
GERM 102 Elementary German 5
GERM 201 Intermediate German 4
GERM 202 Intermediate German 4
GERM 203 Scientific German 4
GERM 204 Scientific German 4
GERM 281 Beginning Conversational German 3
GERM 282 Intermediate Conversational German 3
GERM 283 Advanced Conversational German 3
GERM 291 German for International Commerce 3
GERM 292 German for International Commerce 3

**Japanese**
JAPN 101 Elementary Japanese 5
JAPN 102 Elementary Japanese 5
JAPN 201 Intermediate Japanese 5
JAPN 202 Intermediate Japanese 4
JAPN 281 Beginning Conversational Japanese 3
JAPN 282 Intermediate Conversational Japanese 3
JAPN 283 Advanced Conversational Japanese 3

**Sign Language**
SL 101 Beginning American Sign Language 3
SL 102 Intermediate American Sign Language 3
SL 201 Advanced American Sign Language 3

**Spanish**
SPAN 101 Elementary Spanish 5
SPAN 102 Elementary Spanish 5
SPAN 111 Elementary Spanish for Spanish Speakers 5
SPAN 112 Elementary Spanish for Spanish Speakers 5
SPAN 201 Intermediate Spanish 5
SPAN 202 Intermediate Spanish 4
SPAN 205 Advanced Spanish Composition 3
SPAN 281 Beginning Conversational Spanish 3
SPAN 282 Intermediate Conversational Spanish 3
SPAN 283 Advanced Conversational Spanish 3

**Media Studies**
These courses introduce the student to the role and impact of the mass media and their images in society and provide an exploratory introduction to several media major areas of study.
This area of emphasis will prepare students for possible baccalaureate degree majors in journalism, mass communications, entertainment and media studies, broadcasting, film, and public relations.
Students pursuing these studies may seek careers in screen writing, film and entertainment, mass communications, media, law, education, and journalism.

Select 18 units from at least two disciplines from the following courses:

| ART 108 | Black Images in Popular Culture | 3 |
| or HUM 108 | Black Images in Popular Culture (3) | |
| ENGL 241 | Screenwriting | 3 |
| or TH 241 | Screenwriting (3) | |
| JOUR 100 | Mass Media and Society | 3 |
| JOUR 101 | Beginning Reporting and Newswriting | 3 |
| JOUR 121 | Multimedia Reporting | 3 |
| JOUR 157 | Principles of Public Relations | 3 |
| or BA 157 | Principles of Public Relations (3) | |
| RTV 151 | Motion Pictures, Radio and Television | 3 |
| or TH 151 | Motion Pictures, Radio and Television (3) | |
| RTV 152 | Introduction to Broadcasting | 3 |
| READ 200 | Analysis and Critical Reading | 3 |
| SPAN 206 | Hispanic Literature in the Media | 3 |
| SPCH 130 | Public Speaking | 3 |
| TH 150 | Appreciation and History of the Motion Picture | 3 |
| TH 153 | Motion Picture Production | 3 |
| TH 156 | Television Production | 3 |
| TH 159 | World Film | 3 |
| TH 193 | Motion Picture Editing | 3 |

Total Units Media Studies Area of Emphasis 18
SELF-DEVELOPMENT AND SOCIAL BEHAVIOR

This emphasis provides students with knowledge and understanding of social behavior theories, concepts, and principles as applied to self-development. It is designed to prepare students to use acquired knowledge to communicate and collaborate more effectively. These courses are intended to assist students with the application of this knowledge to their lives in meaningful ways, including student growth, purpose, and vitality. Students will learn to become productive citizens who care for themselves and others and will be prepared to work with people and their communities.

This area of emphasis will prepare students for possible baccalaureate degree majors in social, health, and human services majors.

Students pursuing these studies may seek careers in service/community-oriented fields, fitness, and in health professions.

Select at least 6 units from Section 1, at least 3 units from Section 2, and at least 3 units from Section 3. Then complete at least 6 additional units from any section or combination of sections (1, 2, or 3) to reach a total of 18 units.

Section 1 — Theory and Background
Select at least 6 units from the following courses:

- ANTH 170 Introduction to Language and Culture 3
- BA 107 Human Relations in Business 3
- CD 110 Child Development 3
- CDEC 113 The Child, the Family, and the Community 3
- CDIT 151 Infant and Toddler Development 3
- ENGL 106 Introduction to Linguistics 3
- GEOG 102 Natural and Cultural Geography 3
- HIST 101 American History and Constitution 3†
- HIST 102 Political and Social History of the United States: 1550s to 1876 3†
- HIST 103 Political and Social History of the United States: 1877-Present 3†
- HIST 110 African American History 3
- HIST 120 History of California 3
- PE 105 Student Athletes in Society 2
- PE 253 Sports Psychology 3
- POL 101 Introduction to Political Science and American Government 3†
- PSYC 101 General Introductory Psychology 3
- PSYC 220 Research Methods 3
- PSYC 245 Drugs and Behavior 3
- PSYC 251 Developmental Psychology 3
- PSYC 261 Social Psychology 3
- PSYC 271 Abnormal Psychology 3
- PE 105 The Student Athlete and Society 2
- PE 106 Women in Sports 3
- or WS 106 Women in Sports (3)
- PE 253 Sports Psychology 3
- SOC 101 Introductory Sociology Principles 3
- SOC 110 Marriage and the Family 3
- SOC 201 Social Problems 3
- SOC 205 Introduction to Social Science Research 3
- SPAN 245 Introduction to Chicano/Mexican American Culture 3
- SPCH 110 Intercultural Communication 3
- SPCH 120 Fundamentals of Interpersonal Communication 3
- SPCH 130 Fundamentals of Speaking 3
- SPCH 132 Fundamentals of Small Group Communication 3†
- SPCH 235 Fundamentals of Argumentation and Persuasion 3
- TH 108 Improvisation for Theater 3
- TH 110 Fundamentals of Acting 3
- WS 101 Issues for Women in American Society 3

† UC credit limits may apply. HIST 101, 101LC, 102, 102LC and 103 are combined: maximum credit, two courses. HIST 103 and 210 combined: maximum credit, one course. SPCH 100 and 132 combined: maximum credit, one course. POL 101 and 102 combined: maximum credit, one course. Please see list of UC transferable courses in ASSIST (http://www.assist.org) or a counselor for explanation.

Section 2 — Student Development and Application
Select at least 3 units from the following courses:

- COUN 100 Counselor Aide in the Community College 2
- COUN 150 Dynamics of Leadership 3
- COUN 200 Success in College and Career 3
- COUN 210 Job Search Strategies 3
- COUN 220 Transition to Universities 3
- LIB 100 Introduction to Library Resources 1

Section 3 — Student Vitality
Select at least 3 units from the following courses:

- HED 100 Contemporary Health Problems 3
- HED 101 Stress Management 3
- HED 103 Women, Their Bodies and Health 3
- or WS 103 Women, Their Bodies and Health (3)
- HED 200 Nutrition for Health, Fitness and Physical Activity 3
- HO 151 Elements of Nutrition 3
- HO 152 Normal and Therapeutic Nutrition 3
- PE 130 Stretching PE 131 1†
- PE 131 Walking for Fitness 1†
- PE 135A Circuit Weight Training, Beginning 1†
- PE 135B Circuit Weight Training, Intermediate/Advanced 2†
- PE 138 Yoga 1†
- PE 139 Pilates Conditioning 1†
- PE 141 Fitness and Wellness 3†
- PE 142 Fitness and Wellness for Older Adults 2†
- PE 143 Personal Fitness Program 1†
- PE 146 Weight Management 1†
- PE 149A Beginning Jogging for Fitness 1†
- PE 149B Intermediate Jogging for Fitness 2†
- PE 160 Personal Self Defense 1†
- PE 254 Measurement and Interpretation of Fitness 3

† UC credit limits may apply. Any or all of these PE courses combined; maximum credit, four units. Please see list of UC transferable courses in ASSIST (http://www.assist.org) or a counselor for explanation.

Total Units Self-Development and Social Behavior Area of Emphasis 18
SOCIAL AND BEHAVIORAL SCIENCE

The following area of study allows students to take courses that will prepare them for possible majors within the field of social and behavioral science. Courses in the social and behavioral sciences focus on the human and social conditions of society. Courses explain how people behave within their societies and social institutions, including interactions between subcultures, creating an appreciation of human interaction and perceptions of reality. Using critical analysis, students will develop an awareness of social science research methods and theories in the social and behavioral sciences.

This area of emphasis will prepare students for possible baccalaureate degree majors in anthropology, economics, history, political science, psychology, and sociology.

Students pursuing these studies may seek careers in social work, counseling, probation and parole, politics, archiving, and business.

Select 18 units from at least three different disciplines.

AJ 101 Introduction of Administration of Justice 3
ANTH 100 Cultural Anthropology 3
or SOC 101 Introductory Sociology Issues (3)
ANTH 120 Introduction to Archaeology 3
ANTH 170 Introduction to Language and Culture 3
ANTH 200 Native Peoples of North America 3
ANTH 202 The Maya, Inca and Aztecs: Ancient Civilizations of the Americas 3
ANTH 205 The Anthropology of Sexuality and Gender 3
or WS 205 The Anthropology of Sexuality and Gender (3)
CD 110 Child Development 3
COUN 200 Success in College and Career 3
ECON 101 US and Global Economy to Economic Issues and Policy 3†
ECON 102 Women in Global Economy 3
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3
ECON 204 Money, Ethics, and Economic Justice 3
GEOG 102 Natural and Cultural Geography 3
GEOG 105 World Regional Geography 3
HIST 101 American History and Constitution 3†
HIST 102 Political and Social History of the United States: 1500s to 1876 3†
HIST 103 Political Social History of the United States: 1877 to Present 3†
HIST 110 African-American History 3
HIST 120 History of California 3
HIST 204 Women in American History 3
or WS 204 Women in American History (3)
HIST 210 History of the United States in the Post World War II Era 3†
HIST 220 History of the Americas 3
HIST 221 History of the Americas 3
HIST 230 History of Mexico 3
HIST 235 History of Latin America 3
HIST 241 Western Civilization 3
HIST 245 World Civilization from Antiquity to 1500 3
HIST 246 World Civilization from 1500 to Present 3
HIST 250 History of England, Great Britain and the Commonwealth 3
HIST 255 History of Russia and the Soviet Union 3
HIST 260 Survey of the History of Asia 3
HIST 265 Selected Problems in Contemporary Asian History 3

POL 101 American Political Institutions 3†
POL 110 California State and Local Government 3
POL 201 Introduction to Political Science and American Government 3†
POL 210 International Relations 3
POL 220 Comparative Government 3
POL 230 Contemporary Political Issues: Middle East 3
PSYC 101 General Introductory Psychology 3
PSYC 150 Personal and Social Adjustment 3
PSYC 251 Developmental Psychology 3
PSYC 261 Social Psychology 3
PSYC 271 Abnormal Psychology 3
SOC 110 Marriage and the Family 3
SOC 120 Introduction to Human Sexuality 3
SOC 201 Social Problems 3
SOC 202 Gender and Society 3
SOC 205 Introduction to Social Science Research 3
SOC 210 American Minority Relations 3
SOC 220 Introduction to Human Services 3
SOC 215 Sociology of Cultural Diversity: Challenge and Change 3
SOC 230 Juvenile Delinquency 3
SOC 250 Sociology of Aging 3
WS 101 Issues for Women in American Society 3
WS 102 Women and Religion 3
WS 206 Women in the Global Economy 3

† UC credit limits may apply. No credit for ECON 101 if taken after ECON 202, HIST 101, 101LC, 102, 102LC, and 103 are combined: maximum credit, two courses. HIST 103 and 210 combined: maximum credit, one course. POL 101 and 201 combined: maximum credit, one course. Please see list of UC transferable courses in ASSIST (http://www.assist.org) or a counselor for explanation.

Total Units Social And Behavioral Science Area of Emphasis 18

VISUAL COMMUNICATION

This area of emphasis will focus on the power of images and serves as an introduction to techniques for improved visual communication. It starts with a study of images in culture, progresses to visual communication exploration, and culminates with learning hands-on skill development.

This area of emphasis will prepare students for possible baccalaureate degree majors in art, graphic arts, graphic design, desktop publishing, communication, theater, and photography.

Students pursuing these studies may seek careers in film and entertainment, mass communications, media, publishing, photography, education, museum work, web design, theater stage design, and journalism.

Section 1 — Critical Analysis of Images

Select 3 units from the following courses:

ART 108 Black Images in Popular Culture 3
or HUM 108 Black Images in Popular Culture (3)
ART 109 Gender and Sexuality in Art 3
or HUM 109 Gender and Sexuality in Art (3)
PHOT 160 History of Photography 3
Section 2 — Theories of Visual Communication
Select 6 units from the following courses:

ART 188  Design for Desktop Publishing 3
JOUR 121  Multimedia Reporting 3
JOUR 130  Photojournalism 3
or PHOT 130  Photojournalism (3)
PHOT 100  Introduction to Photography 3
PHOT 110  Introduction to Digital Photography 3
SPAN 206  Hispanic Literature in the Media 3

Section 3 — Applied Techniques of Communication
Select 9 units from the following courses:

ART 110  Freehand Drawing 3
ART 116  Beginning Printmaking 3
ART 120  Two-Dimensional Design 3†
ART 111  Storyboarding and Graphic Novel Illustration 3
ART 150  Introduction to Ceramics 3
ART 182A  Lettering and Typography 3
ART 184  Graphic Design 3
TH 153  Motion Picture Production 3
TH 156  Television Production 3
TH 193  Motion Picture Editing 3

† U.C. credit limits may apply. Please see list of U.C. transferable courses in ASSIST (http://www.assist.org) or a counselor for explanation.

Total Units Visual Communication Area of Emphasis 18

MACHINE TOOL TECHNOLOGY

CAREER OPPORTUNITIES:
Machinist
Machine Shop Owner

CERTIFICATE OF ACHIEVEMENT

MACHINIST OPTION

MTT 94L  Manual Machining Laboratory (3 times) 3
MTT 50  CNC Shop Math 3
MTT 52  Setup and Operation of CNC Mills 2.5
MTT 54  CNC Blueprint Reading 2.5
MTT 56  CNC Shop Inspection 2
MTT 57  Setup and Operation of CNC Lathes 2.5
MTT 58  Computer Assisted Inspection Using Verisurf 3.5
MTT 60  Advanced Machine Tool Concepts 2
MTT 62  Fixture Tooling 2
MTT 100  Machine Tool Introduction 2

TOTAL UNITS 25

NUMERICAL CONTROL MACHINE OPERATOR OPTION

MTT 91L  CNC Mill Machining Laboratory (2 times) 2
MTT 95L  CNC Lathe Machining Laboratory (2 times) 2
MTT 50  CNC Shop Math 3
MTT 52  Setup and Operation of CNC Mills 2.5
MTT 54  CNC Blueprint Reading 2.5
MTT 56  CNC Shop Inspection 2
MTT 57  Setup and Operation of CNC Lathes 2.5
MTT 58  Computer Assisted Inspection Using Verisurf 3.5
MTT 60  Advanced Machine Tool Concepts 2
MTT 62  Fixture Tooling 2
MTT 100  Machine Tool Introduction 2
WELD 100  Welding Fundamentals 2.5

TOTAL UNITS 28 (30)

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include (1) the above requirements for a Certificate of Achievement; (2) MTT 60 and MTT 62 if not taken already for the selected Certificate of Achievement; (3) MTT 92L or MTT 93L; (4) the Associate of Arts Degree general education requirements; and (5) electives as needed.

RECOMMENDED ELECTIVES: WELD 120, WELD 130.

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 ASSUANCE (QA)
MFGT 60 Quality Assurance (QA) 1.5
MFGT 55 Quality Control (QC) 1.5
MFGT 57 Total Quality Management (TQM) 1.5
— 4.5

QUALITY CONTROL (QC)
MFGT 55 Quality Control (QC) 1.5
MFGT 53 Statistical Process Control (SPC) 1.5
— 3.0

STATISTICAL PROCESS CONTROL (SPC)
MFGT 55 Quality Control (QC) 1.5
MFGT 53 Statistical Process Control (SPC) 1.5
TM 50 Technical Math 3.0
— 5.5

TOTAL QUALITY MANAGEMENT (TQM)
MFGT 57 Total Quality Management (TQM) 1.5
MFGT 60 Quality Assurance (QA) 1.5
MFGT 59 Design of Experiments (DOE) 1.5
MFGT 58 Benchmarking 1.5
— 6.0

ISO 9000
MFGT 60 Quality Assurance (QA) 1.5
MFGT 55 Quality Control (QC) 1.5
MFGT 56 ISO 9000:2000 1.5
— 4.5

ADVANCED QUALITY SYSTEMS (AQS)
MFGT 57 Total Quality Management (TQM) 1.5
MFGT 53 Statistical Process Control (SPC) 1.5
MFGT 58 Benchmarking 1.5
MFGT 59 Design of Experiments (DOE) 1.5
— 6.0

MASS COMMUNICATIONS

CAREER OPPORTUNITIES:
Advertising Sales
Anchorperson/Newscaster*
Audio Engineer/Sound Editor
Broadcast Engineering
Technician
Broadcast Journalist*
Copy Editor/Writer
Desktop Publisher
Disk Jockey
Journalist (print/multimedia)

News Director/Editor*
Photojournalist
Production Manager/Assistant*
Public Relations*
Reporter*
Sales Manager*
Sports Writer/Broadcaster*
Station Manager*
Teacher/Professor*
Weathercaster*

*Bachelor's degree normally required

BROADCAST MEDIA

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

COMPLETE 20.5 CORE UNITS
26.5 UNITS

MFGT 57 Total Quality Management (TQM) 1.5
MFGT 60 Quality Assurance (QA) 1.5
MFGT 59 Design of Experiments (DOE) 1.5
MFGT 58 Benchmarking 1.5
— 6.0

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 117 Stand-Up Comedy 3
TH 241 Screenwriting 3

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

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 160 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

JOURNALISM

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

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 160 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

See Cerritos College Graduation Requirements.
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 50  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)  1
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 Major Requirements 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.

JOURNALISM
TRANSFER MAJOR REQUIREMENTS
COMMON LOWER DIVISION MAJOR PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

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

ADDITIONAL LOWER DIVISION PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS
California State University – Fullerton
Journalism Concentration, (print, broadcast and visual journalism emphasis), Communications Major
TH 241  Screenwriting  3

Other Communication major concentrations are: Advertising; Entertainment Studies; Photo communications; Public Relations.

Please note that double counting of Journalism courses for general education is not permitted.

California State University – Long Beach
NOTE:  All students entering Journalism Production classes at CSULB must be familiar with at least one established word-processing Major Requirements, and be able to type at a rate of at least 40 words per minute.

Students should meet with a Journalism Advisor upon entrance at CSULB.

California Polytechnic University, Pomona
Communication Major, Subplan Journalism

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 130  Photo Journalism</td>
</tr>
<tr>
<td>ART 188  Design for Desktop Publishing</td>
</tr>
<tr>
<td>PHOT 100  Introductory Photography</td>
</tr>
<tr>
<td>SPCH 235  Fundamentals of Argumentation and Persuasion</td>
</tr>
<tr>
<td>MATH 112  Elementary Statistics</td>
</tr>
<tr>
<td>or PSYC 210  Elementary Statistics</td>
</tr>
</tbody>
</table>

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

San Diego State University

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

There is also another course required for Journalism, JMS 220, that is not articulated with San Diego State.  There is also a foreign language graduation requirement which requires completion up to the third college semester.

NOTE:  All prerequisites must be taken for a grade and completed with a minimum 3.0 GPA.  Journalism is an impacted major and will require grades of “C” or better in the above prerequisite classes 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 Major Requirements.

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.

JOURNALISM
CERTIFICATE OF ACHIEVEMENT
TOTAL OF 38 UNITS
CORE REQUIREMENTS: (9 UNITS)

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

140
Curriculum and Requirements for Majors, Certificates and Transfer Programs

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 50</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 160</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 50</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 105</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 (1)</td>
<td></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 122</td>
<td>Creating Podcasts for Media</td>
<td>1</td>
</tr>
<tr>
<td>JOUR 130</td>
<td>Photo Journalism</td>
<td>3</td>
</tr>
<tr>
<td>or PHOT 130</td>
<td>Photo Journalism (3)</td>
<td></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 (3)</td>
<td></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 (1)</td>
<td></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 50</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</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>

BROADCAST JOURNALISM

VERIFICATION OF COMPLETION

The verification helps the student focus on the study of and preparation for entry level employment in the field of broadcast news at radio stations and television stations, and in online journalism ventures. This certificate is one part of a two-part verification combination that prepares the student for an associate degree in Broadcast Media. (See Verification of Completion Radio-TV Announcing)

BROADCAST JOURNALISM CERTIFICATE REQUIREMENTS - 11 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 112</td>
<td>Copy Editing Skills</td>
<td>1</td>
</tr>
<tr>
<td>JOUR 170</td>
<td>Broadcast News</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 11

*May be taken a maximum of 2 times 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.

DESKTOP PUBLISHING VERIFICATION REQUIREMENTS - 14 UNITS

Select 11 units from the following:

<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 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>JOUR 103</td>
<td>Newspaper Article Writing</td>
<td>2</td>
</tr>
<tr>
<td>PHOT/JOUR 103</td>
<td>Photo Journalism</td>
<td>3</td>
</tr>
<tr>
<td>ART 182A</td>
<td>Lettering &amp; Typography</td>
<td>3</td>
</tr>
<tr>
<td>ART 186</td>
<td>Computer Graphics and Adobe Illustrator</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>Advertising</td>
<td>3</td>
</tr>
</tbody>
</table>
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 UNITS

- JOUR 100 Mass Communications and Society (3)
- JOUR 101 Beginning Newswriting (3)
- JOUR 120 Internet for Journalists (2)
- PHOT 110 Introduction to Digital Imaging (3)
  or ART 192 Photoshop/Digital Imaging (3)

Plus one unit from the following:

- JOUR 298 Directed Studies (1)
  or JOUR 50 Editorial Board (1)

Plus two units from the following:

- JOUR 103 Newspaper Article Writing (2)
  or JOUR 105 Newspaper Production (2)

And three units from the following:

- ART 196 Introduction to Designing Web Graphics (3)
- CIS 205 Programming in HTML for the World Wide Web (1.5)
- CIS 120 Web Design with Microsoft Front Page (1.5)
- PHOT 112 Intermediate Digital Photography (3)

PHOTOJOURNALISM

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 UNITS

- 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 160 Magazine Production (can be repeated) (1**)
- JOUR 298 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

PUBLIC RELATIONS

CERTIFICATE OF ACHIEVEMENT

TOTAL OF 38 UNITS

CORE REQUIREMENTS (12 UNITS)

- JOUR 100 Mass Communications and Society (3)
- JOUR 101 Beginning Newswriting and Reporting (3)
- JOUR 121 Multimedia Reporting (3)
- JOUR 157 Principles of Public Relations (3)
  or BA 157 Principles of Public Relations (3)

DEPARTMENT REQUIREMENTS

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

- JOUR 103 Newspaper Article Writing (2)
- JOUR 105 Newspaper Production (2)
- JOUR 106 talonmarks.com (1)
- JOUR 160 College Magazine Production (requires corequisite) (1)
- RTV 155 Radio Production (3)
- ART 188 Design for Desktop Publishing (3)
- BA 109 Marketing (3)
- JOUR 130 Photo Journalism (3)
  or PHOT 130 Photo Journalism (3)
- PHOT 100 Introductory Photography (3)
- PHOT 110 Introduction to Digital Photography (3)

ADDITIONAL REQUIREMENTS (UP TO 5 UNITS)

- ART 194 Multimedia Design (3)
- ART 196 Introduction to Designing Web Graphics (3)
- 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 122 Creating Podcasts for Media (1)
- JOUR 201 Advanced Reporting and Editing (3)
- JOUR 220 Feature Article Writing (3)
- JOUR 298 Directed Studies in Journalism (1)
  or JOUR 299 Directed Studies in Journalism (1)
  (must be a media internship) (2)
  or JOUR 171 Work Experience in Journalism (1)
  (must be a media internship)
- SPCH 160 Parliamentary Procedure (1)

See Cerritos College Graduation Requirements.
MATHEMATICS

CAREER OPPORTUNITIES:
Actuary  Loan Officer
Statistician  Marketing Researchers
Appraiser  Methods Analyst
Estimator  Mathematician
Financial Analyst  Teacher
Financial Planner

TRANSFER MAJOR REQUIREMENTS

COMMON LOWER DIVISION PREPARATION
FOR CALIFORNIA STATE UNIVERSITY
AND UNIVERSITY OF CALIFORNIA
MATH 150 Precalculus Mathematics 4
MATH 170 Analytic Geometry and Calculus I 4
MATH 190 Analytic Geometry and Calculus II 4
MATH 220 Analytical Geometry and Calculus III 4

ADDITIONAL LOWER DIVISION MAJOR PREPARATION
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University - Dominguez Hills

MATHEMATICS OPTION
PHYS 201 Engineering Physics 4
and PHYS 202 Engineering Physics 3
and PHYS 203 Engineering Physics 3

MATH EDUCATION OPTION
MATH 112 Elementary Statistics 4
CIS 171 Visual Basic Major Programming 3
and PHYS 202 Engineering Physics 4
and PHYS 203 Engineering Physics 3

California State University – Fullerton

MATH 240 Calculus and Differential Equations 4

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
CCIS 292 Data Structures 3.5
CIS 214 UNIX 3

ECONOMICS COGNATE
ECON 201 Principles of Macroeconomics 3
ECON 202 Principles of Microeconomics 3

PHYSICS/ENGINEERING COGNATE
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4
PHYS 203 Engineering Physics 4

CHEMISTRY COGNATE
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5

CIVIL ENGINEERING COGNATE
ENGR 235 Statics 3

CALIFORNIA STATE UNIVERSITY - LONG BEACH
CIS 280 Object-Orientated Programming in C++ 3
PHYS 201 Engineering Physics 4

APPLIED MATHEMATICS OPTION
Complete the requirements listed above and follow sub-option 1 (science and engineering) PHYS 202, PHYS 203 or Engineering 215 or Engineering 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

MATH 240 Calculus and Differential Equations 4
PHYS 201 Engineering Physics 4
PHYS 202 Engineering Physics 4

Beside the B.S. 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

MATH 240 Calculus and Differential Equations 4
CIS 180 Programming in C/C++ 3
or CIS 178 Programming in Fortran (3)
PHYS 201 Engineering Physics 4
and PHYS 202 Engineering Physics 4
and PHYS 203 Engineering Physics 4

Major concentrations in Applied Mathematics, Secondary Teacher Preparation/Pure Math, or Statistics require the same lower division preparation.

University of California – Irvine

MATH 240 Calculus and Differential Equations 4
CIS 180 Programming in C/C++ 3
or CIS 178 Programming in Fortran (3)
or CIS 182 Java Programming 3.5
or CIS 280 Object-Orientated Programming in C++ (3)
CHEM 111 General Chemistry 5
and CHEM 112 General Chemistry 5
or PHYS 201 Engineering Physics (4)
and PHYS 202 Engineering Physics (4)
or PHYS 201 Engineering Physics (4)
curriculum and requirements for majors, certificates and transfer programs

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>PHYS 203</td>
<td>Engineering Physics</td>
<td>(4)</td>
</tr>
</tbody>
</table>

Preference will be given 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 Education, Statistics, or a concentration in Mathematics for Economics is also offered.

university of california - los angeles

mathematics/b.s.

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

two additional courses from:

<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>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/computation/b.s. option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>
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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>
<tr>
<td>or CHEM 111</td>
<td>General Chemistry</td>
<td>(5)</td>
</tr>
<tr>
<td>or CHEM 112</td>
<td>General Chemistry</td>
<td>(5)</td>
</tr>
</tbody>
</table>

mathematics/applied science/b.s. option

actuarial concentration:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>and ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>and ACCT 101</td>
<td>Fundamentals of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>and ACCT 102</td>
<td>Fundamentals of Accounting II</td>
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medical and life sciences concentration plan:

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

There are also concentration plans in the following: Management / Accounting and History of Science.

mathematics/economics/b.s. option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

There is also an Applied Math B.S. degree at UCLA as well. Degree requirements can be obtained at www.assist.org.

university of california – riverside

courses required for both the b.a. and b.s. degree

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH 240</td>
<td>Calculus and Differential Equations</td>
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<tr>
<td>CIS 180</td>
<td>Programming in C/C++</td>
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</table>

add the following for the b.s. degree (recommended)

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CIS 280</td>
<td>Object-Oriented Programming in C++</td>
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</tr>
<tr>
<td>or CIS 292</td>
<td>Data Structures</td>
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applied math track/b.s. option

biology option

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<tr>
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<th>Course 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>and BIOL 201</td>
<td>Principles of Biology</td>
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<tr>
<td>or BOT 120</td>
<td>Intro to Plant Science</td>
<td>(4)</td>
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<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>
<td>(5)</td>
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chemistry option

<table>
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<th>Course Title</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>and CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>and PHYS 202</td>
<td>Engineering Physics</td>
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</tr>
<tr>
<td>and PHYS203</td>
<td>Engineering Physics</td>
<td>4</td>
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</table>

economics option

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics</td>
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environmental science option

<table>
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<th>Course 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>and CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology (recommended)</td>
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physics option

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<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHYS 201</td>
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<tr>
<td>and PHYS 202</td>
<td>Engineering Physics</td>
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</tr>
<tr>
<td>and PHYS203</td>
<td>Engineering Physics</td>
<td>4</td>
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</table>

statistics option

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

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.

The IGETC is not accepted for majors housed in the college of Natural and Agricultural Sciences. Transfer students are encouraged to follow the college of Natural and Agricultural Sciences breadth pattern as outlined on www.assist.org.
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 REQUIREMENTS:
Complete the above common lower division requirements and all AA degree general education requirements for a total of at least 60 units.

MEDICAL ASSISTANT
Cerritos College offers a Certificate of Achievement or an Associate of Arts in Medical Assisting. The student must achieve a grade of “C” or better in all required medical assisting courses to qualify for the Certificate of Achievement and/or Associate of Arts degree in Medical Assisting. Twelve units of the Medical Assistant program must have been taken within the last five (5) years. Upon successful completion of program requirement, the student is eligible for a Cerritos College Medical Assistant pin.

1. Medical Assistant Certificate of Achievement
   The Medical Assistant Program may be completed in two semesters when started in the fall semester. Both front office (administrative) and back office (clinical) training is available. A clinical lab experience is 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. Including A&P120, electives, and general education requirements for a minimum of 60 units.

Course selection for a full-time student starting in the fall semester is recommended as follows:
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 numerical 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 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.

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 ASSISTING
CERTIFICATE OF ACHIEVEMENT

<table>
<thead>
<tr>
<th>Units</th>
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<tbody>
<tr>
<td>MA 60</td>
</tr>
<tr>
<td>MA 62A</td>
</tr>
<tr>
<td>MA 62B</td>
</tr>
<tr>
<td>MA 64</td>
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<tr>
<td>MA 66</td>
</tr>
<tr>
<td>MA 67</td>
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<tr>
<td>*MA 68</td>
</tr>
<tr>
<td>*MA 73</td>
</tr>
<tr>
<td>*MA 74</td>
</tr>
<tr>
<td>MA 161</td>
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</table>

HEALTH OCCUPATIONS

<table>
<thead>
<tr>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HO 53</td>
</tr>
<tr>
<td>HO 54</td>
</tr>
<tr>
<td>HO 55</td>
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PSYCHOLOGY

<table>
<thead>
<tr>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PSYC 101</td>
</tr>
<tr>
<td>or PSYC 150</td>
</tr>
</tbody>
</table>
ELECTIVES (Choose only one of the following):

HO 150  Professional/CPR and First Aid  1.5  (Fall semester only)

or SPAN 223  Spanish for Health and Medical Careers  3  (Or an equivalent)

or HO 151  Elements of Nutrition  2

or HO 152  Nutrition  (3)

TOTAL CERTIFICATE REQUIREMENTS  (29) 30

*Students may select one of these options to complete the medical assisting internship requirement. Only one option can be selected and the course may not be repeated more than one time.

Students not currently employed in a medical office should enroll in MA 68. Students who are currently employed in a medical office up to 19 hours per week enroll in MA 73. Students who are currently employed in a medical office more than 20 hours per week enroll in MA 74.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

For an Associate in Arts degree a student must meet the requirements for a Certificate of Achievement in Medical Assisting. The student must take A&P 120, electives and general education requirements to achieve a minimum of 60 units. See Cerritos College Graduation Requirements.

CAREER OPPORTUNITIES: Upon completion of 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.

MENTAL HEALTH WORKER

CAREER OPPORTUNITIES:
Paraprofessional in Community-Based Mental Health
Paraprofessional for Housing Departments

CERTIFICATE OF ACHIEVEMENT MAJOR REQUIREMENTS

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 Major Requirements.

MICROBIOLOGY

CAREER OPPORTUNITIES:
Public Health Microbiologist
Pharmaceutical Industry
Brewing
Industrial Fermentation
Dairy Industry
University Research Projects
Hospital Lab Technician

TRANSFER MAJOR REQUIREMENTS

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</td>
<td>Principles of Biology 5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology 5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry 5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 5</td>
</tr>
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</table>

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills
(Option within the Biology B.S. major)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics 4</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological, and Social Sciences 4</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>Analytic Geometry and Calculus I 4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics 4</td>
</tr>
<tr>
<td>and PHYS 102</td>
<td>General Physics 4</td>
</tr>
<tr>
<td>or PHYS 201</td>
<td>Engineering Physics 4</td>
</tr>
<tr>
<td>and PHYS 202</td>
<td>Engineering Physics 4</td>
</tr>
<tr>
<td>and PHYS 203</td>
<td>Engineering Physics 4</td>
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California State University – Long Beach

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICRO 200</td>
<td>Principles and Applications of Microbiology 5</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological, and Social Sciences 4</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>Analytic Geometry and Calculus I 4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics 4</td>
</tr>
<tr>
<td>and PHYS 102</td>
<td>General Physics 4</td>
</tr>
<tr>
<td>or PHYS 201</td>
<td>Engineering Physics 4</td>
</tr>
<tr>
<td>and PHYS 202</td>
<td>Engineering Physics 4</td>
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</table>

California State University – Los Angeles

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry 4</td>
</tr>
<tr>
<td>MATH 140</td>
<td>Trigonometry 3</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Pre-Calculus Mathematics 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
(Microbiology Option & Medical Technology Option)
A&P 201 Human Physiology (Required for Medical Technology Option only) 4
CIS 102 Introduction to Microcomputer Hardware & Applications Software (Required for Microbiology Option only) 3
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
ENGL 100 Freshman Composition 4
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
MATH190 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.

MUSIC – GENERAL
ASSOCIATE IN ARTS DEGREE REQUIREMENTS
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:  UNITS
MUS 100 Music Appreciation 3
MUS 106 Music Theory/Musicianship I 5
MUS 107 Music Theory/Musicianship II 5
MUS 112 Elementary Piano I 2
MUS 113 Elementary Piano II 2
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.

COMMERCIAL MUSIC
ASSOCIATE IN ARTS DEGREE REQUIREMENTS
REQUIRED MUSIC COURSES:  UNITS
MUS 104 American Popular Music 3
MUS 104B History of Rock Music 3
MUS 106, 107 Music Theory/Musicianship I, II 5-5
MUS 112 Elementary Piano I 2.5
MUS 135 This Business of Music 3
MUS 144, 145 Electronic Synthesizer I, II 2-1
MUS 146 Recording Techniques 2
*Music Electives 6

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.
MUSIC

TRANSFER MAJOR REQUIREMENTS

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 program (4 semesters). In addition, a full year of music history and literature is generally required.

Most four-year colleges and universities administer a piano proficiency examination that must be passed by all music majors at their campus. Placement in the appropriate level of theory and private study is made by the Music Department.

Portfolios and/or auditions may be required for entrance into a music major.

See counselor or university catalog for more information.

UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 148, 149, 150, 151</td>
<td>Private Study/Recital I, II, III, IV</td>
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VOICE STUDENTS

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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MUS 116, 117</td>
<td>Voice Class I, II</td>
<td>2-2</td>
</tr>
<tr>
<td>MUS 112, 113</td>
<td>Elementary Piano Class I, II</td>
<td>2-2</td>
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</table>

INSTRUMENTALISTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 112, 113</td>
<td>Elementary Piano Class I, II</td>
<td>2-2</td>
</tr>
</tbody>
</table>


ADDITIONAL LOWER DIVISION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Fullerton

Each student will present an audition in their principal performance area (instrument or voice) and a placement audition for class piano. Music majors are expected to participate in a major performance ensemble every semester.

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

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

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.

Students in the bachelor of music options of history and literature and performance may complete the second semester of French or German or successfully pass the appropriate foreign language exam.

All applicants to the program must meet with the BA advisor prior to or at the beginning of the first semester of residence to review the statement of purpose and to draw up an individualized study plan.

University of California – Irvine

It is recommended that transfer students enter the major with college-level private instrumental or voice instruction; two years of music theory; the history of western music; ear-training; sight-singing; sight-reading and piano. All transfer students must pass a performance audition in order to declare a major in either the B.A. degree Major Requirements.

Transfer students must also take the placement tests in musicianship, theory, and history in order to receive Pass 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. For music education students, an additional year of participation in a large performance group is recommended as well as a course in cultural or world music.

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.

PIANO

CERTIFICATE OF COMPLETION

The two-level Certificate of Completion piano teaching Major Requirements 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:

TEACHING BEGINNING PIANO CERTIFICATE OF COMPLETION

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
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</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>
<td>5</td>
</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>
</tr>
<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>
<th>COURSE</th>
<th>TITLE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 107</td>
<td>Music Theory/Musicianship II</td>
<td>5</td>
</tr>
<tr>
<td>MUS 149</td>
<td>Private Study/Recital II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 150</td>
<td>Private Study/Recital III</td>
<td>1</td>
</tr>
<tr>
<td>MUS 153</td>
<td>The Art of Teaching Intermediate Piano</td>
<td>2</td>
</tr>
<tr>
<td>MUS 154</td>
<td>Piano Ensemble</td>
<td>1.5</td>
</tr>
</tbody>
</table>

TOTAL UNITS: 13.5

NATURAL SCIENCES – GENERAL

CAREER OPPORTUNITIES:
- Health Professions
- Secondary Teacher

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

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. Choose at least 4 units from section a, at least 4 units from section b, and at least 3 units from section c;
4. Completion of another 7 units of science related course work from any section below, for a combined total of at least 18 units of science related course work.

A. Course in the Physical Sciences

<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>ASTR 102</td>
<td>Introductory Astronomy: Stars and the Universe</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 103</td>
<td>Introductory Astronomy: The Solar System</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 104</td>
<td>Life in the Universe</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 105L</td>
<td>Observational Astronomy</td>
<td>1</td>
</tr>
<tr>
<td>ASTR 106</td>
<td>History of Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 100</td>
<td>Introductory Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 105</td>
<td>Chemistry for Elementary School Teachers</td>
<td>1.5</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Elementary Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis Chemistry</td>
<td>4</td>
</tr>
<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>ESCI 101</td>
<td>Physical Ecology</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 102</td>
<td>Physical Ecology Field Laboratory</td>
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</tr>
<tr>
<td>ESCI 104</td>
<td>Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 104L</td>
<td>Oceanography Laboratory</td>
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</tr>
<tr>
<td>ESCI 106</td>
<td>Weather and Climate</td>
<td>3</td>
</tr>
<tr>
<td>ESCI 110</td>
<td>Introduction to Earth Science</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Physical Geography</td>
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<tr>
<td>GEOG 101L</td>
<td>Physical Geography Laboratory</td>
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</tr>
<tr>
<td>GEOG 103</td>
<td>Environmental Geography</td>
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<tr>
<td>GEOL 100</td>
<td>Natural History of So California</td>
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</tr>
<tr>
<td>GEOL 101</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 201</td>
<td>Earth History</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 204</td>
<td>Geology of the Western National Parks and Monuments</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 207</td>
<td>Paleontology, Life of the Past</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 208</td>
<td>The Age of the Dinosaurs</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 209</td>
<td>Natural Disasters</td>
<td>3</td>
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<tr>
<td>PHYS 100</td>
<td>Elementary Physics</td>
<td>4</td>
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<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>
<td>4</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>PS 100</td>
<td>Physical Science of Modern Technology</td>
<td>3</td>
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<tr>
<td>PS 112</td>
<td>Physical Science for Elementary School Teachers</td>
<td>3</td>
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B. Courses In The Biological Sciences

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>A&amp;P 120</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>A&amp;P 130</td>
<td>Human Anatomy and Physiology</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>A&amp;P 151</td>
<td>Introduction to Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>ANTH 115</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 115L</td>
<td>Introduction to Physical Anthropology Lab</td>
<td>1</td>
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<tr>
<td>BIOL 115</td>
<td>Marine Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 202</td>
<td>Molecular Biology/Genetics</td>
<td>4</td>
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<tr>
<td>BOT 120</td>
<td>Introduction to Plant Science</td>
<td>4</td>
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<tr>
<td>MICR 200</td>
<td>Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 241</td>
<td>Introduction to Psychobiology</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 120</td>
<td>Introduction to Animal Biology</td>
<td>4</td>
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</table>

C. Courses In Mathematics

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>MATH 105</td>
<td>Activity-Based Probability and Statistics for Elementary and Middle School Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110A</td>
<td>Mathematics for Elementary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110B</td>
<td>Mathematics for Elementary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 114</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Finite Mathematics</td>
<td>4</td>
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<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological, and Social Science</td>
<td>4</td>
</tr>
<tr>
<td>MATH 140</td>
<td>Trigonometry</td>
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<tr>
<td>MATH 150</td>
<td>Precalculus Math</td>
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</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I</td>
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<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
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</table>
**NEW PRODUCT DEVELOPMENT**

**CERTIFICATE OF ACHIEVEMENT PROGRAM**

**AUTOMOTIVE AFTERMARKET PRODUCT DEVELOPMENT OPTION**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>NPD 100</td>
<td>Product Development in a Global Economy</td>
<td>3</td>
</tr>
<tr>
<td>NPD 101</td>
<td>Rapid Prototyping</td>
<td>3</td>
</tr>
<tr>
<td>NPD 102</td>
<td>Quality Systems for Automotive Industries</td>
<td>3</td>
</tr>
<tr>
<td>NPD 103</td>
<td>Advanced Tooling and Materials for New Product Development</td>
<td>3</td>
</tr>
<tr>
<td>NPD 104</td>
<td>Productivity in Automotive Aftermarket Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>NPD 105</td>
<td>Electronic Systems and Integration in Automotive Aftermarket</td>
<td>3</td>
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**NEW PRODUCT DEVELOPMENT AND FABRICATION OPTION**

<table>
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<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>NPD 100</td>
<td>Product Development in a Global Economy</td>
<td>3</td>
</tr>
<tr>
<td>NPD 101</td>
<td>Rapid Prototyping</td>
<td>3</td>
</tr>
<tr>
<td>MTT 51</td>
<td>MaterCam Introduction</td>
<td>3.5</td>
</tr>
<tr>
<td>MTT 52</td>
<td>Setup and Operation of CNC Milling Machines</td>
<td>3</td>
</tr>
<tr>
<td>MTT 57</td>
<td>Setup and Operation of CNC Lathes</td>
<td>3</td>
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<tr>
<td>PMT 100</td>
<td>Plastics Technology</td>
<td>2.5</td>
</tr>
<tr>
<td>WELD 100</td>
<td>Welding Fundamentals</td>
<td>2.5</td>
</tr>
<tr>
<td>WMT 101</td>
<td>Introduction to Woodworking</td>
<td>3</td>
</tr>
</tbody>
</table>

**ASSOCIATE OF ARTS DEGREE REQUIREMENTS:**

Complete 60 units to include: (1) the above requirements for a specific Certificate of Achievement; (2) the Associate of Arts Degree general education requirements; and (3) electives as needed.

RECOMMENDED ELECTIVES: MTT 177, MTT 278, PMT 221, WELD 130, WMT 111L.

CAREER OPPORTUNITIES: Design Modeler, Automotive Stylist, Fabrication Craftsman.

See Cerritos College Graduation Requirements.

**NURSING**

The Cerritos College Nursing Program, approved by the Board of Registered Nursing and accredited by the National League for Nursing accredited Commission, Inc., offers an opportunity to prepare for a nursing career through mastery of a specific body of knowledge and skills. To qualify for the program, students must successfully complete prerequisite courses and other requirements as stated below. The generic program (Option A) consists of four semesters of sequenced courses. Students may receive Pass for prior nursing courses to facilitate advanced placement. These students include Licensed Psychiatric Technicians, Licensed Vocational Nurses, students transferring from other accredited programs, and foreign-educated nurses.

For successful completion of the nursing program, the student is required to achieve a minimum 75% in all nursing and nursing-related courses. This is consistent with the Board of Registered Nursing's standard of competency for nursing practice. Completion of the program meets qualifications for the NCLEX-RN licensing exam.

**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 Nursing Competencies Task Force in 2000 as the reference to guide and structure curriculum development, define and level competencies within the Major Requirements and identify competence expected at graduation.

There are five steps to the Nursing Process: assessment, diagnosis, planning, implementation and evaluation. The Cerritos College nursing student utilizes the Roy Model to collect and organize patient data during the assessment stage of the Nursing Process.

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 Program 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 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 the development of the nurse; political, social and economic forces affecting 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 100, MATH 80, and READ 54 or equivalent with grades of Pass 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 if grade of “D”, “F”, or “W” (withdrawal) is earned to achieve a better grade. A&P 150, A&P 151, and MICR 200 are recommended to be completed within six (6) years of admission.
4. 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 Pass or “C” or higher. Valid California LPT 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 Pass 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 215, 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 Pass or “C” or higher. ENGL 100, MATH 80, and READ 54 or equivalent with grades of Pass 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 Pass or “C” or higher.

Option A, B, C, and E applicants must show successful completion of ENGL 100, MATH 80, and READ 54 or equivalents with grades of Pass 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 online 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. 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.

5. Applicants will be notified of eligibility for admission to the nursing program in writing.

6. 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).

7. Notification of admission to the program will be done in writing.

8. 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.

9. 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 a new student the right to attend the College Student Handbook.

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, $190 for non-residents of California and $237 for international students. A College Services ID fee ($110) 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 program is available from the National League for Nursing Accrediting Commission, Inc., 3343 Peachtree Road NE, Suite 500, Atlanta Georgia 30326; telephone (404) 973-3750.

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 require clearance of a criminal background check and drug screen. 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 or drug screen, 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 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 license 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, regency of acts or crimes, compliance with court sanctions, and evidence of rehabilitation.

NURSING PROGRAM OPTIONS

There are six enrollment options in the Nursing Program:

A. Associate in Arts Degree (also referred to as the “generic” option or Associate Degree in Nursing)
B. LPT-ADN (Licensed Psychiatric Technician to Associate Degree in Nursing)
C. LVN-ADN (Licensed Vocational Nurse to Associate Degree in Nursing)
D. LVN-30 Unit Option (LVN + 30 units qualifying for NCLEX-RN, non-degree)
E. Transfer and Challenge
F. Board of Registered Nursing Referral

For Options A, B, C, and E – To graduate with an Associate in Arts Degree in Nursing, the student is required to complete, in addition to the nursing core courses and nursing-related courses, the following general education courses: PSYC 251, PHIL 104, and SPCH 100, SPCH 120, SPCH 130, SPCH 132, or SPCH 150 and one (1) 3-unit course from U.S. History or American Government (U.S. History or American Government courses chosen from Plan A, Sections B1 or B2) as listed in the College’s General Education Requirements found in the College General Catalog and Schedule of Classes. Option A students desiring to matriculate to the CSU or UC system should also take PSYC 101 and SOC 101 or ANTH 100. For additional information, please refer to CSU or UC requirements.

OPTION A –

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

PREREQUISITES:
A&P 150, A&P 151, ENGL 100, and MICR 200 or equivalents with grades of Pass or “C” or higher. Successful completion of ENGL 100, MATH 80, and READ 54 or equivalents with grades of Pass or “C” or higher or satisfactory completion of the college placement test process.

REQUIRED COURSES

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<thead>
<tr>
<th>Semester 1</th>
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<tbody>
<tr>
<td>NRSG 210 **Fundamentals of Nursing</td>
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<tr>
<td>NRSG 211 **Introduction to Theoretical Framework</td>
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<tr>
<td>NRSG 212 **Medical-Surgical Nursing</td>
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<tr>
<td>NRSG 213A *Major Drugs and Nursing Management I</td>
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<tr>
<th>Semester 2</th>
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<tbody>
<tr>
<td>NRSG 213B **Major Drugs and Nursing Management II</td>
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<tr>
<td>NRSG 220 **Medical-Surgical Nursing 3</td>
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<tr>
<td>NRSG 222 **Maternal/Child Nursing</td>
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<table>
<thead>
<tr>
<th>Semester 3</th>
<th>Units</th>
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<tbody>
<tr>
<td>NRSG 230 **Psychosocial and Community Nursing</td>
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</tr>
<tr>
<td>NRSG 232 **Medical-Surgical Nursing 4</td>
<td>5.0</td>
</tr>
</tbody>
</table>

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 of 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 equivalents with grades of Pass or “C” or higher. ENGL 100, MATH 80, and READ 54 or equivalents with grades of Pass or “C” or higher or satisfactory completion of the college placement test process.

Additional courses required for admission: HOS 152, NRSG 25, NRSG 211, NRSG 213A, NRSG 251, and PSYC 251 or equivalents with grades of Pass or “C” or higher. Valid California LPT license.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Semester 1</th>
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<tbody>
<tr>
<td>NRSG 212 **Medical-Surgical Nursing 2</td>
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<tr>
<td>NRSG 213B **Major Drugs and Nursing Management II</td>
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<td>NRSG 220 **Medical-Surgical Nursing 3</td>
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<tr>
<td>NRSG 222 **Maternal/Child Nursing</td>
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<th>Units</th>
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<tr>
<td>NRSG 230 **Psychosocial and Community Nursing</td>
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<tr>
<td>NRSG 232 **Medical-Surgical Nursing 4</td>
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<td>NRSG 240 **Medical-Surgical Nursing 5</td>
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<tr>
<td>NRSG 242 **Professional Role Transition</td>
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ELECTIVES

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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>NRSG 48T **Elective Nursing Tutorial</td>
</tr>
<tr>
<td>NRSG 80 **Nursing Process Documentation</td>
</tr>
</tbody>
</table>

*6-week courses **9-week courses

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 Pass or "C" or higher. Successful completion of READ 54, MATH 80, and ENGL 100 or equivalent with grades of Pass 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 Pass 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.

REQUIREDS COURSES

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<td>NRSG 230 **Psychosocial and Community Nursing</td>
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<tr>
<td>NRSG 232 **Medical-Surgical Nursing</td>
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<table>
<thead>
<tr>
<th>Semester 2</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>NRSG 240 **Medical-Surgical Nursing</td>
<td>5.0</td>
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<tr>
<td>NRSG 242 *Professional Role Transition</td>
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</table>

ELECTIVES

| NRSG 48T **Elective Nursing Tutorial | 0.5 |
| NRSG 80 **Nursing Process Documentation | 1.0 |

*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 Pass 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

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<tr>
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<tr>
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<td>5.0</td>
</tr>
<tr>
<td>NRSG 242 *Professional Role Transition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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 Pass 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 Pass or "C" or higher. ENGL 100, MATH 80, and READ 54, or equivalent with grades of Pass 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 PASS

A. Pass 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 Pass to be granted.

C. Pass 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. Pass 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 Pass is being requested.

B. Pass 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 Pass 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 Pass or “C” or higher.

**NURSING—RN TRANSFER PROGRAM**
The following program does not lead to an Associate in Arts Degree. To earn an AA degree, see Nursing in the catalog for the major requirements.

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

**California State University – Fullerton**
CSUF offers two BSN degrees, the RN-BSN and the Entry Level BSN Program.

**RN-BSN Program**
Admission Requirements:
- Meet requirements for admission to the University as a transfer student.
- Completion of an AA degree in Nursing or equivalent.
- Current licensure as a registered nurse in California.
- Completion of one year of satisfactory work experience as a registered nurse recommended.

Completion of the following prerequisite courses:
- A&P 200 & 201 or A&P 150 & A&P 151
- CHEM 100 or CHEM 110, or CHEM 111
- MICR 200
- PSYC 101
- SOC 101 or ANTH 100

**Entry Level BSN Program**
Admission Requirements:
- Meet requirements for admission to the University as a transfer student.
- Cumulative GPA of 2.75 or above as determined by official transcript.
- TEAS exam with a minimum composite score of 74%.
- Completion of prerequisite with “C” or better in each course and an overall minimum.

GPA of 2.5 in the Pre-Nursing prerequisites:
- A&P 200 & AP 201 or AP 150 & 151
- MICR 200
- CHEM 100

Please note science courses must have been completed within 5 years prior to entering the program.

**California State University – Los Angeles**
CSULA offers two pathways in nursing; the Basic Nursing Program and the RN transfer program. In the basic program students are admitted to lower division nursing following completion of prerequisite courses. The RN transfer program is designed for students who transfer from a community college with an Associate of Arts or Associate of Science in Nursing. These students are admitted to upper division nursing.

**Basic Nursing – BS and RN Transfer – BS**
Prerequisite Courses:
- A&P 200 and A&P 201 or A&P 150 and A&P 151
- CHEM 100
- MICRO 200
- ENGL 100
- One course from ENGL 103*, Phil 103, Phil 106 or SPCH 235
- PSYC 101
- PSYC 251
- SOC 101
- SPCH 130
- HO 151 or HO 152

A statistics course which includes inferential statistics is required.
(RN transfer students are exempt)

Student are advised to complete ENGL 103 for the CSU/GE critical thinking requirement. This will meet a graduation requirement at CSULA as the prerequisite for a writing proficiency requirement.

**California State University – Long Beach**
CSULB offers two bachelors degree: Bachelor of Science in Nursing- Basic and 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 summer term for Fall entrance or the prior Fall 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 program are impacted. Please refer to the admissions website for details. [http://www.csulb.edu/depts/enrollment/admissions/impactedmajor.html](http://www.csulb.edu/depts/enrollment/admissions/impactedmajor.html)

**Bachelor of Science in Nursing- Basic**
Prerequisite Courses:
- A&P 200 or A&P 150
- A&P 201 or A&P 151
- MICRO 200
- PSYC 101
- SOC 101
Curriculum and Requirements for Majors, Certificates and Transfer Programs

Prerequisite General Education Courses:
- CSU GE Oral Communication – 3 semester units
- CSU GE Written Communication – 3 semester units
- CSU GE Critical Thinking – 3 semester units
- CSU GE Quantitative Reasoning – 3 semester units

Bachelor 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 Major Requirements for equivalency by an Accredited Associate degree program.
• Completion of CSU or IGETC general education certification requirements.

University of California – Los Angeles
UCLA offers two programs leading to the BS degree in nursing: the Nursing – generic/Pre-licensure/B.S. degree and the Nursing RN-B.S./Post Licensure/BS degree.

Nursing-Generic/Pre-licensure/B.S.
The Generic/Pre-licensure 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:
• Completion of specified major prerequisites with a “C” or better.
• Completion of a Statement of Purpose
• Two recommendations from Teachers or Counselors and one from a professional in a supervisory educational or mentoring relationship
• Minimum cumulative GPA of 3.5 in all UC – transferable courses’
• Completion of IGETC

Completion of the following prerequisites:
- A&P 200 or A&P 150
- A&P 201 or A&P 151
- BIO 200, BIO 201, and BIO 202
- CHEM 111, CHEM 112 and CHEM 211
- MICRO 200
- PSYC 101
- ENGL 102 or ENGL 103 or PHIL 103 or PSYC 103 or SPCH 235
- SPCH 130

Mathematics – One UC-transferable course in mathematical concepts and quantitative reasoning that has a prerequisite of intermediate algebra or higher.

Nursing-RN-BS/Post Licensure/B.S.
The RN-BS/Post licensure program at UCLA is intended to prepare RN’s for advanced practice study at the graduate level. The nursing program is open to transfer applicants at the junior and senior level and second baccalaureate applicants. For more information visit the website:
www.nursing.ucla.edu and www.admission.ucla.edu

ADMISSION REQUIREMENTS:
• 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 fulltime experience within the past 5 years.
• “C” or better grades on 4 required Excelsior College examinations
For more information: www.excelsior.edu
• Completion of a statement of Purpose
• Three recommendation forms from teachers or other professionals Minimum cumulative GPA of 3.0 in all UC transferable courses
• Completion of the following prerequisites:
  - A&P 200 or A&P 150
  - A&P 201 or A&P 151
  - MICRO 200
  - PHYS 100
  - CHEM 110
  - BIO 200* 201* & 202*
  - CHEM 111*, 112* and 211*
  - ANTH 100
  - PSYC 101
  - SOC 101
  - ENGL 100 and ENGL 102 or ENGL 103 or PHIL 103 or PSYC 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.
Completion of IGETC is NOT recommended by the School of Nursing for the RN-BS/Post licensure program.

University of California – Irvine
UCI offers a BS degree in Nursing Science. The number of transfer students that can be admitted to the major is limited and selective. Junior – level applicants with the highest grades overall and who satisfactorily complete course prerequisite will be given preference for admissions. All applicants must complete the following courses with grades of “B” or better.

Program prerequisites:
- BIO 201
- BIO 202
- CHEM 111
- CHEM 112
- CHEM 211
- MATH 112 or PSYC 210
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 Verification of Completion shall be awarded to the student who completes with a grade of “C” or better the following courses:

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<thead>
<tr>
<th>Units</th>
<th>Description</th>
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<tbody>
<tr>
<td></td>
<td>Retail Products for Pharmacy Clerks</td>
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<tr>
<td></td>
<td>Pharmacy Clerk Clinical Experience</td>
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<td></td>
<td>Pharmacy Introduction</td>
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<tr>
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<td>Pharmacy Skills Lab Introduction</td>
</tr>
<tr>
<td></td>
<td>Basic Mathematics</td>
</tr>
<tr>
<td></td>
<td>Microcomputer Keyboarding</td>
</tr>
<tr>
<td></td>
<td>Typewriting Speed/Control Building</td>
</tr>
<tr>
<td></td>
<td><strong>BCOT 62</strong></td>
</tr>
<tr>
<td></td>
<td><em>BCOT 135</em>*</td>
</tr>
<tr>
<td>TOTAL</td>
<td>REQUIRED</td>
</tr>
<tr>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

*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 Pass or “C” or higher, or earning a score on the Writing Proficiency Test sufficient for placement in ENGL 52.

MATHEMATICS PROFICIENCY REQUIREMENT:
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 Pass or “C” or higher or for other options see your counselor.

READING PROFICIENCY REQUIREMENT:
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 Pass 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 program. 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.
5. Prior to enrolling in PHAR 90 and PHAR 95, you may be required to obtain a valid CPR card for Basic Life Support Healthcare Provider, offered through the American Heart Association.

**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.

158
CERTIFICATE OF ACHIEVEMENT

REQUIRED COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 56</td>
<td>Medication Calculations</td>
<td>1</td>
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<tr>
<td>PHAR 50</td>
<td>Pharmacuetics</td>
<td>1.5</td>
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<tr>
<td>PHAR 60</td>
<td>Pharmacy Introduction</td>
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<tr>
<td>PHAR 60L</td>
<td>Pharmacy Skills Lab Introduction</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 62</td>
<td>Pharmacy Operations I</td>
<td>.5</td>
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<tr>
<td>PHAR 63</td>
<td>Pharmacy Operations II</td>
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<tr>
<td>PHAR 64</td>
<td>Pharmacy Operations III</td>
<td>2</td>
</tr>
<tr>
<td>PHAR 81</td>
<td>Over-The-Counter Products</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 83</td>
<td>Pharmacy Technician Pharmacology I</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 85</td>
<td>Pharmacy Technician Pharmacology II</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 90</td>
<td>Clinical Experience I</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 95</td>
<td>Clinical Experience II</td>
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<tr>
<td>MA 161</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>or A&amp;P 120</td>
<td>Introduction to Anatomy and Physiology</td>
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Optional:

<table>
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<tr>
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<th>UNITS</th>
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<tbody>
<tr>
<td>PHAR 65</td>
<td>Pharmacy Operations IV</td>
<td>2</td>
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<tr>
<td>PHAR 73/74</td>
<td>Pharmacy Technician Occupational Work Experience</td>
<td>3-4</td>
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</table>

TOTAL CERTIFICATE REQUIREMENTS 30/31

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.

CAREER OPPORTUNITIES: Employment as a Pharmacy Technician in community or hospital pharmacy assisting registered pharmacists in performance of assigned duties.

See Cerritos College Graduation Requirements.

PHILOSOPHY

CAREER OPPORTUNITIES:

Professor
Secondary Teacher

TRANSFER MAJOR REQUIREMENTS

California State University – Los Angeles

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
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</table>

Option I: General Option

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>PHIL 103</td>
<td>Philosophical Reasoning: Critical Thinking in Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 106</td>
<td>Introduction to Logic</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 the 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>PHIL 100</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 102</td>
<td>Introduction to Ethics</td>
<td>(3)</td>
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</table>

California State Polytechnic – Pomona

Philosophy Law and Society

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 102</td>
<td>Introduction to Ethics</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
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</tbody>
</table>

Philosophy Science, Technology and Society

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 102</td>
<td>Introduction to Ethics</td>
<td>(3)</td>
</tr>
<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
</tr>
</tbody>
</table>

University of California – Irvine

NOTE: In fulfillment of the requirements below, a single course may be used only once.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 106</td>
<td>Introduction to Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Introduction to 20th Century Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>FREN 202</td>
<td>Intermediate French</td>
<td>(4)</td>
</tr>
<tr>
<td>or GERMAN 202</td>
<td>Intermediate German</td>
<td>(4)</td>
</tr>
<tr>
<td>or JAPANESE 202</td>
<td>Intermediate Japanese</td>
<td>(4)</td>
</tr>
<tr>
<td>or SPANISH 202</td>
<td>Intermediate Spanish</td>
<td>(4)</td>
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</tbody>
</table>

At least one course from each area, A-D:

A)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
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</tr>
<tr>
<td>ENGL 101</td>
<td>Critical Thinking Literature</td>
<td>3</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>PHIL 103</td>
<td>Philosophical Reasoning: Critical thinking in Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 103</td>
<td>Critical Thinking in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SPEECH 235</td>
<td>Fundamentals of Argumentation and Persuasion</td>
<td>3</td>
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</table>

B)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>ENGL 230A</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 230B</td>
<td>Introduction to American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 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 235</td>
<td>Readings in the Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 246A</td>
<td>Survey of English Literature</td>
<td>3</td>
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<tr>
<td>ENGL 246B</td>
<td>Survey of English Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 248A</td>
<td>Masterpieces of World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 248B</td>
<td>Masterpieces of World Literature</td>
<td>3</td>
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</table>

C)

<table>
<thead>
<tr>
<th>COURSE</th>
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<th>UNITS</th>
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<tbody>
<tr>
<td>HIST 102</td>
<td>Political and Social History of the U.S.</td>
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<tr>
<td>HIST 103</td>
<td>Political and Social History of the U.S.</td>
<td>3</td>
</tr>
<tr>
<td>HIST 210</td>
<td>Post WWII History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 235</td>
<td>History of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 241</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 242</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>HIST 245</td>
<td>World Civilization from Antiquity to 1500</td>
<td>3</td>
</tr>
<tr>
<td>HIST 246</td>
<td>World Civilization from 1500 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 260</td>
<td>Survey of the History of Asia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 265</td>
<td>Selected Problems in Contemporary Asian History</td>
<td>3</td>
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D)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>PHIL 100</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 102</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 201</td>
<td>Introduction to 20th Century Philosophy</td>
<td>3</td>
</tr>
</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

Philosophy/Law and Society

PHIL 106  Introduction to Logic  3

Recommended:

PSYC 220  Research Methods  4

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 units minimum and all AA degree general education requirements for a total of at least 60 units.

PHOTOGRAPHY

CAREER OPPORTUNITIES:

Commercial Advertising Photography
Gallery Director/Assistant*
Industrial Photography
Newspaper/Magazine Photography
Photo Lab Technician
Portrait Photography

* Bachelor's degree normally required

ASSOCIATE IN ARTS DEGREE MAJOR REQUIREMENTS

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: 35mm 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.

TRANSFER MAJOR REQUIREMENTS

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  Intro to Mass Communication  3
JOUR 101  Begin Newswriting and Report  3
PHOTO 100  Introductory Photography  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 units 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 this 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 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.

RECOMMENDED ELECTIVES: PHOT 102, 122, 160, 200, 234, 240, JOUR 100, 101, and 130

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.

PHOT 110  Introduction to Digital Photography  3
PHOT 112  Intermediate Digital Photography  3

TOTAL  6

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 Major Requirements, as well as entry-level expertise in gallery exhibition conventions.

FINE ART PHOTOGRAPHY

VERIFICATION OF COMPLETION REQUIREMENTS  15 UNITS

Select 15 units from the following:

PHOT 100  Introductory Photography  3
PHOT 102  Intermediate Photography  3
PHOT 122  Color Photography  3
PHOT 160  History of Photography  3
PHOT 234  Portfolio Development  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

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

PHOT 100  Introductory Photography  3
PHOT 110  Introduction to Digital Photography  3
PHOT/JOUR 130  Photo Journalism  3
PHOT 171  Occupational Work Experience in Photography  1
PHOT 230  Portrait Photography  3
PHOT 232  Approaches to Studio Lighting  3
PHOT 234  Portfolio Development  3
PHOT 298  Directed Studies  1
PHOT 299  Directed Studies  2

One course must be taken from the following selection

BA 100  Fundamentals of Business  3
BA 110  Advertising  3
BA 113  Legal Environment of Business  3
BUS A 100  Introduction to Accounting  3

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.

PHOT 100  Introductory Photography  3
PHOT 102  Intermediate Photography  3
PHOT 200  Advanced Photography  3

TOTAL  9
PHYSICAL EDUCATION

CAREER OPPORTUNITIES:
Coach
Fitness Director YMCA and YWCA
Instructor in Private and Public Camps
Instructor at Rehabilitation Centers
Athletic Trainer
Trainer at Sports Medicine Clinics
Teacher (Elementary or Secondary)

ASSOCIATE IN ARTS DEGREE REQUIREMENTS
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 3 units

See Cerritos College Graduation Requirements.

REQUISITED CARE CORE COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 100</td>
<td>Introduction to Physical Education and Sport</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>HED 110</td>
<td>First Aid and CPR</td>
<td>3</td>
</tr>
<tr>
<td>A&amp;P 130</td>
<td>Human Anatomy and Physiology</td>
<td>5</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>
</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>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PE 121</td>
<td>Adapted Cardiovascular Exercise</td>
<td>1</td>
</tr>
<tr>
<td>PE 131</td>
<td>Walking for Fitness</td>
<td>1</td>
</tr>
<tr>
<td>PE 132A</td>
<td>Low Impact Aerobics</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 132B</td>
<td>Aerobic Activities</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 133</td>
<td>Step Aerobics</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 134</td>
<td>Water Aerobics</td>
<td>1</td>
</tr>
<tr>
<td>PE 143</td>
<td>Personal Fitness Major Requirements</td>
<td>1</td>
</tr>
<tr>
<td>PE 145</td>
<td>Basic Training and Physical Conditioning</td>
<td>1</td>
</tr>
</tbody>
</table>

(2) Fitness

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 122</td>
<td>Adapted Strength Training</td>
<td>1</td>
</tr>
<tr>
<td>PE 130</td>
<td>Stretch and Relaxation</td>
<td>1</td>
</tr>
<tr>
<td>PE 135A</td>
<td>Circuit Weight Training, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 135B</td>
<td>Circuit Weight Training, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 138</td>
<td>Yoga</td>
<td>1</td>
</tr>
<tr>
<td>PE 139</td>
<td>Pilates Conditioning</td>
<td>1</td>
</tr>
<tr>
<td>PE 146</td>
<td>Weight Management</td>
<td>1.5</td>
</tr>
</tbody>
</table>

(3) Aquatics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 123</td>
<td>Adapted Swimming</td>
<td>1</td>
</tr>
</tbody>
</table>

PE 150A   | Swimming, Beginning                             | 1     |
PE 150B   | Swimming, Intermediate/Advanced                 | 2     |
PE 170    | Water Polo                                      | 2     |

(4) Team Activities

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

(5) Individual Activities

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PE 120</td>
<td>Sedentary Activities for Students with Disabilities</td>
<td>1</td>
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<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>
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<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>DAN 105</td>
<td>Introduction to Dance Movement</td>
<td>3</td>
</tr>
<tr>
<td>DAN 109</td>
<td>Introduction to Dance Cultures of the World</td>
<td>2</td>
</tr>
<tr>
<td>DAN 108A</td>
<td>Dance, Modern, Beginning</td>
<td>2</td>
</tr>
<tr>
<td>DAN 108B</td>
<td>Dance, Modern, Intermediate</td>
<td>2</td>
</tr>
<tr>
<td>DAN 106A</td>
<td>Beginning Ballet</td>
<td>2</td>
</tr>
<tr>
<td>DAN 106B</td>
<td>Intermediate Ballet</td>
<td>2</td>
</tr>
<tr>
<td>DAN 125</td>
<td>Introduction to Ballroom Dance</td>
<td>2</td>
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<tr>
<td>DAN 110</td>
<td>Commercial Dance</td>
<td>2</td>
</tr>
<tr>
<td>DAN 121</td>
<td>Latin Social Dance</td>
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</table>

PE ELECTIVE COURSES (3 UNITS MINIMUM)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</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 253</td>
<td>Sports Psychology</td>
<td></td>
</tr>
</tbody>
</table>
PE 254 Measurement and Interpretation of Fitness 3
PE 255 Major Requirements and Principles of Conditioning 3
PE 260 Athletic Injury Assessment and Reconditioning 2
PE 261 Athletic Injury Taping, Bandaging & Immobilization 1
HED 200 Nutrition for Health, Fitness and Physical Conditioning 3

RECOMMENDED GENERAL EDUCATION ELECTIVES
HED 100 Contemporary Health Problems 3
PSYC 101 General Introduction to Psychology 3
SOC 101 Introductory Sociology Principles 3

EXERCISE SCIENCE
ASSOCIATE IN ARTS DEGREE REQUIREMENTS
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
A&P 120* Anatomy and Physiology 4

*(A&P 150 & A&P 151 or A&P 200 & A&P 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 Physical Conditioning 3
PE 271B Occupational Work Experience for Fitness 1

Athletic Training Emphasis
MA 161 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.

TRANSFER MAJOR REQUIREMENTS
COMMON LOWER DIVISION MAJOR PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
</tr>
<tr>
<td>A&amp;P 151</td>
<td>Introduction to Human Physiology</td>
</tr>
</tbody>
</table>

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills

Physical Education Major
A&P 130 Human Anatomy and Physiology 5
or A&P 150 Introduction to Anatomy 4
and A&P 151 Introduction to Physiology 4
or A&P 200 Human Anatomy and Physiology 5
and A&P 201 Human Anatomy and Physiology 5
PE 100 Introduction to Physical Education and Sport 2

Pre-Physical Therapy Option:
BIOL 200 Principles of Biology 5
PHYS 101 General Physics 4
CHEM 111 General Chemistry 5

Fitness Director Option:
PE 132A Low Impact Aerobics 1.5
or PE 132B Aerobics Activities 1.5
or PE 133 Step Aerobics 1.5
or PE 134 Water Aerobics 1
PE 143 Personal Fitness 1
PE 150A Swimming, Beginning 1
or PE 150B Swimming, Intermediate/Advanced 2
PE 135A Circuit Weight Training, Beginning 1
or PE 135B Circuit Weight Training, Intermediate/Advanced 2
PE 141 Fitness and Wellness 3

Teaching Option:
PE 132A Low Impact Aerobics 1.5
or PE 132B Aerobics Activities 1.5
or PE 133 Step Aerobics 1.5
or PE 134 Water Aerobics 1
DANC 125 Introduction to Ballroom Dance 2
or DANC 121 Latin Social Dance 2
PE 154A Badminton, Beginning 2
PE 155B Badminton, Intermediate/Advanced 2
PE 154A Golf, Beginning 1
or PE 156B Golf, Intermediate/Advanced 2
PE 150A Swimming, Beginning 1
or PE 150B Swimming, Intermediate/Advanced 2
PE 159A Tennis, Beginning 1
or PE 159B Tennis, Intermediate/Advanced 2
PE 141 Fitness and Wellness 3
PE 143 Personal Fitness 1
or PE 135A Circuit Weight Training, Beginning 1
or PE 135B Circuit Weight Training, Intermediate/Advanced 2

Select two courses from the following:
PE 176A Basketball, Beginning 1
or PE 176B Basketball, Advanced 2
PE 179A Soccer, Beginning 1
or PE 179B Soccer, Intermediate/Advanced 2
PE 171A Softball 1
or PE 171B Softball, Intermediate/Advanced 2
PE 172A Volleyball 1
or PE 172 Volleyball, Intermediate/Advanced 2

Dance Option:
A&P 130 Human Anatomy and Physiology 5
or A&P 150 Introduction to Human Anatomy 4
and A&P 151 Introduction to Human Physiology 4
or A&P 200 Human Anatomy 5
and A&P 201 Human Physiology 5
PE 156A Golf, Beginning 1
or PE 156B Golf, Intermediate/Advanced 2
PE 150A Swimming, Beginning 1
or PE 150B Swimming, Intermediate/Advanced 2
PE 132A Low Impact Aerobics 1.5
or PE 132B Aerobics Activities 1.5
or PE 133 Step Aerobics 1.5
or PE 134 Water Aerobics 1
or PE 143 Personal Fitness 1
or PE 138 Yoga 1
PE 176A Basketball, Beginning 1
or PE 176B Basketball, Advanced 2
or PE 179A Soccer, Beginning 1
or PE 179B Soccer, Intermediate/Advanced 2
or PE 171A Softball 1
or PE 171B Softball, Intermediate/Advanced 2
or PE 172A Volleyball 1
or PE 172B Volleyball, Intermediate/Advanced 2
PE 154A Badminton, Beginning 1
or PE 154B Badminton, Intermediate/Advanced 2
PE 159A Tennis, Beginning 1
or PE 159B Tennis, Intermediate/Advanced 2
DANC 109 Introduction to Dance Cultures of the World 2
or DANC 110 Beginning Jazz Dance 2
DANC 106A Ballet, Beginning 2
DANC 106B Ballet, Intermediate 2
DANC 108A Dance, Modern, Beginning 2
DANC 108B Dance, Modern, Intermediate 2
DANC 142 Beginning Tap Dance 2
or DANC 125 Introduction to Ballroom Dance 2
or DANC 121 Latin Social Dance 2

Options available are, 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
A&P 120 Introduction to Human Anatomy and
Physiology 4

There are no formally articulated courses but these are the categories
and requirements recommended by CSU Fullerton.

Select six (6) units from the following
Performance Course Categories:
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
Athletic Training Major
A&P 150 Introduction to Human Anatomy 4
or A&P 200 Human Anatomy (5)
A&P 151 Introduction to Human Physiology 4
or A&P 201 Human Physiology (5)
CHEM 100 Introductory Chemistry 4
or CHEM 111 General Chemistry 5
HO 152 Normal and Therapeutic Nutrition 3
HED 100 Contemporary Health Problems 3
PE 107 Introduction to Athletic Training 3
PHYS 101 General Physics 4
MATH 112 Elementary Statistics 4
or PSYC 210 Elementary Statistics 4
PSYC 101 General Introductory Psychology 3

Kinesiology Major
A&P 151 Introduction to Physiology 4
or A&P 201 Human Anatomy and Physiology 5
A&P 150 Introduction to Anatomy 4
or A&P 200 Human Anatomy 5
PSYC 101 General Introductory Psychology 3

ADDITIONAL REQUIREMENTS:
Exercise Science Option
CHEM 111 General Chemistry 5
CHEM 112 General Chemistry 5
MATH 114 College Algebra 4
PHYS 101 General Physics 4
PHYS 102 General Physics 4

In addition, the course below may count toward the 12 lower divison
elective units required:
BIOL 200 Principles of Biology 5
BIOL 201 Principles of Biology 5
HO 152 Normal and Therapeutic Nutrition 3
MA 161 Medical Terminology 3

Fitness Option
HO 152 Normal and Therapeutic Nutrition 3

Take 7 physical activity units from a minimum of two different categories.
See counselor for details.

Kinesiotherapy Option
MATH 112 Elementary Statistics 4
or PSYC 210 Elementary Statistics 4
PSYC 220 Research Methods 4
PSYC 241 Introduction to Psychobiology 3
HED 110 Community First Aid and CPR 3
Take 6 physical activity units; see counselor for details.

**Physical Education Option**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 160</td>
<td>Personal Self Defense</td>
<td>1</td>
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</tbody>
</table>

**Sport Psychology and Coaching Option**

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

You will be required to take at least 2 activity units from the courses listed below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 150A</td>
<td>Swimming, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>PE 150B</td>
<td>Swimming, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 132B</td>
<td>Aerobic Activities</td>
<td>1.5</td>
</tr>
<tr>
<td>or PE 133</td>
<td>Step Aerobics</td>
<td>1.5</td>
</tr>
<tr>
<td>PE 160</td>
<td>Personal Self Defense</td>
<td>1</td>
</tr>
<tr>
<td>PE 135A</td>
<td>Circuit Weight Training, Beginning</td>
<td>1</td>
</tr>
<tr>
<td>or PE 135B</td>
<td>Circuit Weight Training, Intermediate/Advanced</td>
<td>2</td>
</tr>
<tr>
<td>PE 138</td>
<td>Yoga</td>
<td>1</td>
</tr>
<tr>
<td>DANC 125</td>
<td>Introduction to Ballroom Dance</td>
<td>2</td>
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</tbody>
</table>

**California State University – Northridge**

**Kinesiology Major – B.S.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL 120</td>
<td>Introduction to Biological Science</td>
<td>4</td>
</tr>
<tr>
<td>A&amp;P 200</td>
<td>Introduction to Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 201</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>and A&amp;P 151</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 200</td>
<td>Introduction to Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>or A&amp;P 201</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>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</td>
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</tbody>
</table>

**ADDITIONAL REQUIREMENTS:**

**Physical Education Option**

There are no formally articulated courses for Physical Education option.

**Exercise Science Option.**

<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>
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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>
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</table>

**Athletic Training Major – B.S.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</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 112</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Intro to Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**California State University, Los Angeles**

**Kinesiology Major – B.S.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>and A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
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<tr>
<td>or A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
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<tr>
<td>and A&amp;P 151</td>
<td>Introduction to Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>HED 110</td>
<td>Community First Aid and CPR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Pre Calculus</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>
</tr>
<tr>
<td>PHYS 100</td>
<td>Elementary Physics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
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<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles</td>
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</tbody>
</table>

**Exercise Science Major - B.S.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>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>A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>or A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>and A&amp;P 151</td>
<td>Introduction to Human Physiology</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>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
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<tr>
<td>MATH 140</td>
<td>Trigonometry</td>
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<tr>
<td>MATH 150</td>
<td>Pre Calculus</td>
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</tbody>
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**Exercise and Biosciences Option:**

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 200</td>
<td>Principles and Application of Microbiology</td>
<td>5</td>
</tr>
</tbody>
</table>

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

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS**

Complete above common lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 units minimum and all AA degree general education requirements for a total of at least 60 units.

**EXERCISE SCIENCE: ATHLETIC TRAINER AIDE**

**CERTIFICATE OF ACHIEVEMENT**

**DEPARTMENT REQUIREMENTS:**

<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 &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>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PE 260</td>
<td>Athletic Injury Assessment and Reconditioning</td>
<td>2</td>
</tr>
<tr>
<td>PE 261</td>
<td>Athletic Injury Taping, Bandaging &amp; Immobilization</td>
<td>1</td>
</tr>
<tr>
<td>PE 271A</td>
<td>Occupational Work Experience for Athletic Training</td>
<td>1</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: 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

<table>
<thead>
<tr>
<th>Department Requirements</th>
<th>Units</th>
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<tbody>
<tr>
<td>HED 110</td>
<td>Community First Aid and CPR</td>
</tr>
<tr>
<td>HED 200</td>
<td>Nutrition for Health, Fitness and Physical Conditioning</td>
</tr>
<tr>
<td>PE 107</td>
<td>Introduction to Athletic Training</td>
</tr>
<tr>
<td>PE 141</td>
<td>Fitness and Wellness</td>
</tr>
<tr>
<td>PE 254</td>
<td>Measurement and Interpretation of Fitness</td>
</tr>
<tr>
<td>PE 255</td>
<td>Programs and Principles of Conditioning</td>
</tr>
<tr>
<td>PE 271B</td>
<td>Occupational Work Experience for Fitness</td>
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<tr>
<td>A&amp;P 120*</td>
<td>Introduction to Human Anatomy &amp; Physiology</td>
</tr>
<tr>
<td>BA 100</td>
<td>Fundamentals of Business</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.

### COACHING VERIFICATION OF COMPLETION

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
</tr>
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<tbody>
<tr>
<td>PE 103</td>
<td>Theory of Coaching</td>
<td>3</td>
</tr>
<tr>
<td>HED 200</td>
<td>Nutrition for Health, Fitness, and Physical Activity</td>
<td>3</td>
</tr>
<tr>
<td>PE 253</td>
<td>Sport Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HED 110</td>
<td>Community First Aid and CPR</td>
<td>3</td>
</tr>
</tbody>
</table>

**AND ONE COURSE FROM THE FOLLOWING LIST**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
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<td>PE 150A</td>
<td>Beginning Swimming</td>
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<tr>
<td>PE 150B</td>
<td>Intermediate Swimming</td>
<td>2</td>
</tr>
<tr>
<td>PE 151</td>
<td>Beginning Wrestling</td>
<td>1</td>
</tr>
<tr>
<td>PE 154A</td>
<td>Beginning Badminton</td>
<td>1</td>
</tr>
<tr>
<td>PE 154B</td>
<td>Intermediate Badminton</td>
<td>2</td>
</tr>
<tr>
<td>PE 156A</td>
<td>Beginning Golf</td>
<td>1</td>
</tr>
<tr>
<td>PE 156B</td>
<td>Intermediate Golf</td>
<td>2</td>
</tr>
<tr>
<td>PE 159A</td>
<td>Beginning Tennis</td>
<td>1</td>
</tr>
<tr>
<td>PE 159B</td>
<td>Intermediate Tennis</td>
<td>2</td>
</tr>
<tr>
<td>PE 170</td>
<td>Water Polo</td>
<td>2</td>
</tr>
<tr>
<td>PE 171A</td>
<td>Beginning Softball</td>
<td>1</td>
</tr>
<tr>
<td>PE 171B</td>
<td>Intermediate Softball</td>
<td>2</td>
</tr>
<tr>
<td>PE 172A</td>
<td>Beginning Volleyball</td>
<td>1</td>
</tr>
<tr>
<td>PE 172B</td>
<td>Intermediate Volleyball</td>
<td>2</td>
</tr>
<tr>
<td>PE 175A</td>
<td>Beginning Baseball</td>
<td>1</td>
</tr>
<tr>
<td>PE 175B</td>
<td>Intermediate Baseball</td>
<td>2</td>
</tr>
<tr>
<td>PE 179A</td>
<td>Beginning Basketball</td>
<td>1</td>
</tr>
<tr>
<td>PE 179B</td>
<td>Intermediate Basketball</td>
<td>2</td>
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<tr>
<td>PE 200</td>
<td>Baseball</td>
<td>3</td>
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<tr>
<td>PE 201</td>
<td>Baseball Off-Season Conditioning</td>
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</tr>
<tr>
<td>PE 202</td>
<td>Men's Basketball</td>
<td>3</td>
</tr>
<tr>
<td>PE 204</td>
<td>Women's Basketball</td>
<td>3</td>
</tr>
<tr>
<td>PE 206</td>
<td>Men's Cross Country</td>
<td>3</td>
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<tr>
<td>PE 207</td>
<td>Cross Country Conditioning</td>
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<tr>
<td>PE 208</td>
<td>Women's Cross Country</td>
<td>3</td>
</tr>
<tr>
<td>PE 210</td>
<td>Men's Football</td>
<td>3</td>
</tr>
<tr>
<td>PE 213</td>
<td>Intercollegiate Golf</td>
<td>3</td>
</tr>
<tr>
<td>PE 217</td>
<td>Men's Soccer</td>
<td>3</td>
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<td>PE 219</td>
<td>Women's Soccer</td>
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<tr>
<td>PE 221</td>
<td>Women's Softball</td>
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<tr>
<td>PE 222</td>
<td>Softball Pre-Season Conditioning</td>
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<tr>
<td>PE 223</td>
<td>Men's Swimming</td>
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<tr>
<td>PE 225</td>
<td>Women's Swimming</td>
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</tr>
<tr>
<td>PE 227</td>
<td>Men's Tennis</td>
<td>3</td>
</tr>
<tr>
<td>PE 228</td>
<td>Tennis Conditioning</td>
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<tr>
<td>PE 229</td>
<td>Women's Tennis</td>
<td>3</td>
</tr>
<tr>
<td>PE 231</td>
<td>Men's Track &amp; Field</td>
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<tr>
<td>PE 233</td>
<td>Women's Track &amp; Field</td>
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<tr>
<td>PE 234</td>
<td>Track &amp; Field Conditioning</td>
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<tr>
<td>PE 235</td>
<td>Women's Volleyball</td>
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<tr>
<td>PE 236</td>
<td>Volleyball Pre-Season Conditioning</td>
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<tr>
<td>PE 238</td>
<td>Wrestling Off-Season Training</td>
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<tr>
<td>PE 239</td>
<td>Men's Water Polo</td>
<td>3</td>
</tr>
<tr>
<td>PE 241</td>
<td>Women's Water Polo</td>
<td>3</td>
</tr>
<tr>
<td>PE 243</td>
<td>Wrestling</td>
<td>3</td>
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</tbody>
</table>

### PHYSICAL THERAPIST ASSISTANT

#### ASSOCIATE IN ARTS DEGREE REQUIREMENTS

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 Accredited 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 and the California Laws Test for Physical Therapist Assistants.
LENGTH AND KIND OF PROGRAM
The program is four semesters and one summer session 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
   Applicants must present evidence of physical fitness and ability to perform tasks required of a Physical Therapist Assistant. Lab, x-rays and immunization records, drug screens, and background checks 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. In order to be considered for admission, applicants must have a 2.0 minimum grade point average in their overall college coursework, cleared English, Math, and Reading deficiencies, and have the prerequisite courses completed by the April 15th deadline. 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 126, 236, 246).

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 www.cerritos.edu. The application must be returned by April 15.
2. Submit official transcripts of all college work to the Health Occupations Division with the program application. Once admitted, a second set of official transcripts must be submitted 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 Basic Life Support Healthcare Provider offered through the American Heart Association prior to the first hospital experience (PTA 126). Card must be valid throughout the program.
7. A background check is required and a drug screen may be required.
8. Work experience as a Physical Therapy Aide must be verified by a letter or proof of employment by the Physical Therapist supervisor.
9. It is the applicant’s responsibility to ensure that all materials have been received by the application deadline.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS
The following requirements must be completed to qualify for the A.A. Degree:

- A&P 150  Human Anatomy  4
- A&P 151  Human Physiology  4
- ENGL 100  Freshman Composition  4
- MA 161  Medical Terminology  3
- MATH 80  Intermediate Algebra  4
- PSYC 101  General Introductory Psychology  3
- SPCH 100  Oral Communication  3
- or SPCH 130  Fundamentals of Speaking  (3)

Additional General Education Requirements  6 units
### FIRST YEAR

**First Semester**
- PTA 110 Introduction to Physical Therapy: 4 units
- PTA 120 Kinesiology: 4 units

**Second Semester**
- PTA 125 Pathology: 3 units
- PTA 126 Clinical Practicum I: 4 units
- PTA 127 Soft Tissue Interventions: 2 units
- PTA 128 Physical Therapy Aspects of Growth and Development: 3 units
- PTA 235 Neurology: 3 units

**Summer Semester**
- PTA 129 Physical Therapy Aspects of Aging and Integumentary Management: 1.5 units

### SECOND YEAR

**First Semester**
- PTA 230 Therapeutic Exercise: 4 units
- PTA 233 Prosthetics and Orthotics for Allied Health Professionals: 2 units
- PTA 236 Clinical Practicum II: 4 units

**Second Semester**
- PTA 240 Activities of Daily Living: 2 units
- PTA 245 Advanced Modalities: 3 units
- PTA 246 Clinical Affiliation: 4 units
- PTA 250 Licensure Affiliation Preparation: 1 unit

See Cerritos College Graduation Requirements.

### PHYSICS

**CAREER OPPORTUNITIES:**
- Teaching
- Medicine
- Industrial and Governmental Scientific Endeavors
- Geophysicist
- Biophysicist
- Engineer
- Satellite Designer

### TRANSFER MAJOR REQUIREMENTS

**COMMON LOWER DIVISION 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>PHYS 201</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>4</td>
</tr>
<tr>
<td>MATH 170</td>
<td>4</td>
</tr>
<tr>
<td>MATH 190</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>4</td>
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</tbody>
</table>

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

#### California State University - Dominguez Hills (General Physics Option)
- PHYS 203 Engineering Physics: 4 units
- CHEM 111 General Chemistry: 5 units
- CIS 171 Visual Basic Major Programming: 3 units
  **NOTE:** Physics articulation is approved as a sequence only (201+202+203)

#### California State University - Fullerton
- PHYS 203 Engineering Physics: 4 units
- CHEM 111 General Chemistry: 5 units
- CHEM 112 General Chemistry: 5 units

#### California State University - Long Beach
- PHYS 203 Engineering Physics: 4 units
- BIOL 120 Introduction to Biological Science: 4 units
- or BIOL 201 Principles of Biology: 5 units
- CHEM 111 General Chemistry: 5 units
- CHEM 112 General Chemistry: 5 units

#### California State University - Los Angeles
- CHEM 111 General Chemistry: 5 units
- CHEM 112 General Chemistry: 5 units
- MATH 240 Calculus and Differential Equations: 4 units
  **NOTE:** 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 units
- BIOL 120 Introduction to Biological Science: 4 units
- CHEM 111 General Chemistry: 5 units
- CHEM 112 General Chemistry: 5 units
- CIS 180 Programming in C/C++: 3 units
- or CIS 178 Programming in Fortran: 3 units
- MATH 240 Calculus and Differential Equations: 4 units

#### University of California - Irvine
- PHYS 203 Engineering Physics: 4 units
- CIS 180 Programming in C/C++: 3 units
- or CIS 280 Object-Oriented Programming in C++: 3 units
- MATH 240 Calculus and Differential Equations: 4 units
  **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 units
- CHEM 111 General Chemistry: 5 units
- MATH 240 Calculus and Differential Equations: 4 units
  **NOTE:** The Physics articulation is approved as a sequence. (201+202+203)
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.

PLASTICS/COMPOSITES
MANUFACTURING TECHNOLOGY (PMT)

CAREER OPPORTUNITIES:
Injection
Compression and Extrusion Molding
Mold Laminating
Plastic Mold Design and Fabrication
Testing Equipment Set up, Maintenance, and Tooling

CERTIFICATE OF ACHIEVEMENT MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>CORE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMT 100</td>
<td>2.5</td>
</tr>
<tr>
<td>TM 50</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 147</td>
<td>3</td>
</tr>
<tr>
<td>BCOM 148</td>
<td>3</td>
</tr>
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</table>

COMPOSITES MANUFACTURING OPTION

| PMT 61    | Fiberglass I          | 2.5 |
| PMT 63L   | Specialty Plastics Lab | .5  |
| PMT 67    | Fiberglass II         | 2.5 |
| PMT 68    | Plastics Materials and Processes | 2.5 |
| PMT 70    | Composites Technology | 2.5 |
| ENGT 116  | Blueprint Reading for Machine Trades | 2   |

Total Units (including CORE) 24

COMPOSITE INSPECTION OPTION

| PMT 61    | Fiberglass I          | 2.5 |
| PMT 63L   | Specialty Plastics Lab | .5  |
| PMT 67    | Fiberglass II         | 2.5 |
| PMT 70    | Composites Technology | 2.5 |

Total Units (including CORE) 25

PLASTIC/COMPOSITE TOOL DESIGN OPTION

| PMT 65    | Moldmaking I          | 3   |
| PMT 72    | Tooling for Plastics  | 2.5 |
| ENGT 138  | AutoCAD               | 4   |
| ENGT 258  | Design and Production Technology with AutoCAD | 4   |
| ENGR 123  | Descriptive Geometry  | 3   |

Total Units (including CORE) 28

PLASTICS MANUFACTURING OPTION

| PMT 4     | Plastics III          | 2.5 |
| PMT 59    | Injection Molding I   | 2.5 |
| PMT 60    | Extrusion             | 3   |
| PMT 61    | Fiberglass I          | 2.5 |
| PMT 63L   | Specialty Plastics Lab | 5   |
| PMT 64    | Plastics II           | 2.5 |
| PMT 66    | Hydraulics and Pneumatics | 3   |
| PMT 68    | Plastics Materials and Processes | 2.5 |
| PMT 71    | Plastics IV           | 2.5 |
| PMT 72    | Tooling for Plastics  | 2.5 |

Total Units (including CORE) 33

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:
Complete 60 units to include: (1) the above requirements for a specific Certificate of Achievement, (2) ENGT 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)

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 |

Moldmaking Specialty

| PMT 59   | Injection Molding I   | 2.5 |
| PMT 63L  | Specialty Plastics Lab | .5  |
| PMT 65   | Moldmaking            | 3   |

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 |

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Fiberglass/Composite Repair Specialty

- PMT 53 Composite Repair 3
- PMT 61 Fiberglass I 2.5
- PMT 67 Fiberglass II 2.5
- 8

Tooling Specialty

- PMT 63L Specialty Plastics Lab 0.5
- PMT 72 Tooling for Plastics 2.5
- PMT 221 Modelmaking 2.5
- 5.5

POLITICAL SCIENCE

CAREER OPPORTUNITIES:

- Local Government Journalism
- State and Federal Government Public Administration
- Military International Relations
- Foreign Service Professor
- Law Secondary Teacher

TRANSFER MAJOR 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>POL 101 American Political Institutions</td>
<td>3</td>
</tr>
<tr>
<td>or POL 201 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:

- POL 210 Comparative Government 3
- or POL 220 International Relations (3)

California State University – Los Angeles

- PSYC 210 Elementary Statistics 4

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

- POL 210 International Relations 3
- POL 220 Comparative Government 3

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

- POL 210 International Relations 3
- POL 220 Comparative Government 3

Recommended:

- MATH 112 Elementary Statistics 4

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 units minimum, (2) the Associate in Arts degree general education requirements, and (3) electives as needed for a total of at least 60 units

PRE-MEDICAL CAREER PATHWAYS

PRE-CIROPRACTIC 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.
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 2016 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>
</tbody>
</table>

**Additional Social Sciences and or Humanities**

15 units

* For other options see a counselor

**Common Lower Division Preparation for Chiropractic Schools**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
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</tr>
<tr>
<td>CHEM 112</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>5</td>
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<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>PHYS 101</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>3</td>
</tr>
</tbody>
</table>

* For other options see a counselor

**Additional Lower Division Preparation for Specific Institutions**

**Cleveland Chiropractic College of Los Angeles**

www.clevelandchiropractic.edu

Applicants must have completed a minimum of 90 semester units. A grade of “C” or better is required in the 90 semester units. A minimum of 48 semester units must be the specified science and general education requirements. Students who hold a degree leading to licensure/registration in a health science discipline at the baccalaureate level or above with a grade point average of 2.50, or who hold a baccalaureate degree with an earned grade point average of at least 3.25 receive preference for admission.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>5</td>
</tr>
</tbody>
</table>

**Southern California University of Health and Sciences**

Formerly Los Angeles College of Chiropractic

www.scuhs.edu

Applicants must have completed a minimum of 90 semester units. A baccalaureate degree is preferred, although not required. A grade of “C” or higher is required in the 90 semester units. Applicants must have an overall grade point average (GPA) of 2.50 or higher. All courses must qualify as transferable to a Baccalaureate program.

**Common Lower Division Preparation for Dental Schools**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>5</td>
</tr>
</tbody>
</table>

**Common Lower Division Preparation for Chiropractic Schools**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>5</td>
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<tr>
<td>CHEM 112</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>5</td>
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<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>PHYS 101</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>3</td>
</tr>
</tbody>
</table>

* For other options see a counselor

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.


OTHER USEFUL WEBSITES: American Dental Education Association at https://aadsas.adea.org or Dental Admission Test (DAT) information at www.ada.org/prof/ed/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
http://llu.edu/llu/dentistry

University of California, Los Angeles
http://uclassod.dent.ucla.edu/

University of California, San Francisco
http://dentistry.ucsf.edu/ and/or www.assist.org

University of the Pacific, San Francisco Campus
http://dental.pacific.edu/

University of Southern California
www.usc.edu/bsc/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 MOST MEDICAL SCHOOLS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>SUBJECT</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></td>
</tr>
<tr>
<td></td>
<td>(highly recommended)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 205</td>
<td>Quantitative Analysis (highly recommended)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
</tbody>
</table>
Curriculum and Requirements for Majors, Certificates and Transfer Programs

CHEM 212  Organic Chemistry  5
ENGL 100  Freshman Composition  4
ENGL 102  Freshman Composition & Literature  3
or ENGL103*  Critical and Argumentative Writing  3
PHYS 101  General Physics  4
or PHYS 201  Engineering Physics (4)
PHYS 102  General Physics  4
or PHYS 202  Engineering Physics (4)

* For other options see a counselor

Community college pre-med students who plan to transfer to a university need to complete the general education required of the transfer institution, complete the requirements of the undergraduate major and may complete the courses required by the medical school.

MATHEMATICS: Trends in medical education require the medical student to be adequately trained in mathematics. Almost all schools recommend one year of mathematics. Since calculus is recommended in several medical schools, and in some instances required, it is advantageous to complete one year of calculus or at least one semester of calculus. The second semester course may be math statistics or computer science, depending on the specific medical school requirement. Your undergraduate major will help further define your choice of mathematics requirements.

ELECTIVES: Additional science course work in biochemistry, cellular biology, genetics, molecular biology, quantitative analysis chemistry and upper division biological science courses is considered part of the academic commitment beyond the minimum required course work. Spanish is strongly recommended and computer literacy is mandatory.

For more information concerning the above listed requirements at individual schools look up the specific medical school website. The following are ten from a multitude of medical school websites:

Harvard Medical School
www.hms.harvard.edu
Johns Hopkins School of Medicine
www.hopkinsmedicine.org
Loma Linda University School of Medicine
www.llu.edu/llu/medicine
Stanford University School of Medicine
www.med.stanford.edu
U.C. Davis School of Medicine
www-med.ucdavis.edu
U.C. Irvine College of Medicine
www.meduci.edu
U.C. Los Angeles Geffen School of Medicine
www.medstudent.ucla.edu
U.C. San Diego School of Medicine
http://medicine.ucsd.edu
U.C. San Francisco School of Medicine
http://medschool.ucsf.edu
U.S.C. Keck School of Medicine
www.usc.edu/schools/medicine

For further programming and more detailed information about specific medical school program 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: HYPERLINK "http://www.aamc.org". Another recommended web site you may want to consider is The Princeton Online Review ( HYPERLINK "http://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; email HYPERLINK "http://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 program, entering class profiles, costs, etc. This booklet may be obtained at no cost, by writing the American Optometric Association, 243 N. Lindbergh Blvd., St. Louis, MO 63141. 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 www.ucf.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 Code</th>
<th>Course Title</th>
<th>Units</th>
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<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>
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<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>
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<tr>
<td>MATH 112</td>
<td>Mathematical Statistics</td>
<td>3</td>
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<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus</td>
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<tr>
<td>MICR 200</td>
<td>Principles &amp; Applications of Microbiology</td>
<td>5</td>
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<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>
<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 Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PSYC 150</td>
<td>Personal &amp; Social Adjustment</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 251</td>
<td>Developmental Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>PSYC 261</td>
<td>Social Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>PSYC 271</td>
<td>Abnormal Psychology</td>
<td>(3)</td>
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</tbody>
</table>

Biochemistry, Anatomy, and Physiology will be required for those applying for fall 2010.

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 two weeks after the test has been taken. For entry in 2009, the OAT must be completed by March 15th of each admissions season.

Besides the bachelor's degree and the Optometry Admission Test results, all applications must submit three letters of recommendation from non-relatives. Your work within the community, student government, or other service organizations is considered to be important and should be included in your application. Volunteer experience with an optometrist is highly recommended in your preparation for optometry school. If the applicant meets the academic and personal criteria of the preliminary screening, they will be invited for a personal interview on campus. In 2008, ninety-eight students were admitted.

University of California – Berkeley
http://optometry.berkeley.edu

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>A&amp;P 200</td>
<td>Human Anatomy</td>
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<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
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<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 246A</td>
<td>Survey of English Literature</td>
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<td>or ENGL 246B</td>
<td>Survey of English Literature</td>
<td>(3)</td>
</tr>
<tr>
<td>MICRO 200</td>
<td>Principles and Applications of Microbiology</td>
<td>5</td>
</tr>
</tbody>
</table>

BIOL 202, Molecular Biology/Genetics is recommended to prepare students for required upper division equivalent science coursework. Biochemistry is also required and 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 2008 cohort, sixty-six students were admitted with an average 3.5 G.P.A. in prerequisite courses only. The average OAT score was 361 in all subjects. The range of OAT lowest scores was 300 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 areas 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 optometrists need with each patient. Also, new surgical procedures using lasers are available that can correct some vision 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>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200 Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201 Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 111 General Chemistry</td>
<td>5</td>
</tr>
<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>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>MATH 170 Analytic Geometry and Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

* For other options see a counselor

ADDITIONAL REQUIREMENTS FOR SPECIFIC CALIFORNIA PHARMACY SCHOOLS

Loma Linda University – School of Pharmacy
www.llu.edu/llu/sps

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.

A&P 200 Human Anatomy (as of entry 2006) 5
MICRO 200 Principles & Applications of Microbiology 5

PHYS 101 General Physics 4
PHYS 102 General Physics 4
SPCH 100 Fundamentals of Oral Communication 3

A course in biochemistry is also required and is taught at most universities.

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 GPA 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)
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: any two additional courses 3-3
SOCIAL SCIENCES: any two additional courses 3-3
Proficiency in a foreign language such as Spanish is considered highly desirable. It is also strongly recommended that students take upper division courses in biochemistry, physiology and cellular and molecular biology. These courses will better prepare the first year UCSD Pharmacy student.

University of California, San Francisco – School of Pharmacy
http://pharmacy.ucsf.edu

The minimum requirement is 62 semester units. Although this is the absolute minimum requirement, about 96% of the students accepted to U.C.S.F PharmD program have completed a bachelor's degree – usually in biology, biochemistry, or chemistry. The average grade point average of all accepted students is about 3.63. Each year, less than about 1.6% of admitted students enter directly from a California Community College. Last year U.C.S.F PharmD program accepted 122 students from 1,200 applicants.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 202</td>
<td>Principles of Microeconomics</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 101</td>
<td>General Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 102</td>
<td>General Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>(3)</td>
</tr>
<tr>
<td>or ANTH 100</td>
<td>Cultural Anthropology</td>
<td>(3)</td>
</tr>
<tr>
<td>SPCH 130</td>
<td>Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>or SPCH 235</td>
<td>Fundamentals of Argumentation &amp; Persuasion</td>
<td>(3)</td>
</tr>
</tbody>
</table>

University of Pacific
www.pacific.edu/pharmacy

Although a bachelor's degree is not required, a degree can make an applicant more competitive, in recent years a strong majority of the successful applicants have had degrees. There is no absolute G.P.A. cutoff. Admission is competitive and is based on a number of factors in addition to G.P.A. including science grades, recommendations, essay, interview results, and demonstration of your ability to succeed in 17 units or more per semester. Competition can vary from year to year depending upon the size and strength of the applicant pool. The average G.P.A. over the past four years has ranged between 3.3 to 3.4. Check UOP PharmD website for specifically listed general education coursework. Recommended electives include anatomy, genetics, physiology, microbiology, biochemistry, analytical chemistry and physical chemistry.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 101</td>
<td>Principles of Microeconomics</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial and Biological Sciences</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 170</td>
<td>Analytical Geometry and Calculus</td>
<td>(4)</td>
</tr>
<tr>
<td>MICR 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>or PHYS 100</td>
<td>Elementary Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 271</td>
<td>Abnormal Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>SPCH 130</td>
<td>Fundamentals of Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

University of Southern California
www.usc.edu/schools/pharmacy/pharmd/

A minimum of 90 semester units 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 202</td>
<td>Molecular Biology/Genetics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 202</td>
<td>Principles of Microeconomics</td>
<td>(3)</td>
</tr>
</tbody>
</table>

HUMANITIES/FINE ARTS: Two Additional courses 3-3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>MICR 200</td>
<td>Principles &amp; Applications of Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 201</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 101</td>
<td>General Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>PHYS 202</td>
<td>Engineering Physics</td>
<td>4</td>
</tr>
<tr>
<td>or PHYS 102</td>
<td>General Physics</td>
<td>(4)</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 101</td>
<td>Introductory Sociology Principles</td>
<td>(3)</td>
</tr>
</tbody>
</table>

SOCIAL/BEHAVIORAL SCIENCE: Two Additional courses 3-3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH 100</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>or SPCH 120</td>
<td>Interpersonal Communication</td>
<td>(3)</td>
</tr>
<tr>
<td>or SPCH 130</td>
<td>Fundamentals of Speaking</td>
<td>(3)</td>
</tr>
</tbody>
</table>

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

Western University of Health Sciences, College of Pharmacy
www.westernu.edu/pharmacy/pharmd_about.xml

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
perquisites 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 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 Pass, CLEP or Pass 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 Major Requirements after completing a bachelor of science in a related field. The following courses are considered the prerequisite courses for the Major Requirements:

**Prerequisite Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>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>PHYS 101</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics</td>
<td>4</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 programs prerequisite:

<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>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>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>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 200</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>or A&amp;P 150</td>
<td>Introduction to Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>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>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>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>
<tr>
<td>PSYC 101</td>
<td>General Introductory Psychology</td>
<td>3</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
Most successful applicants have 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. Toll free phone: (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>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Statistics</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics</td>
</tr>
</tbody>
</table>

**ADDITIONAL LOWER DIVISION PREPARATION FOR SPECIFIC INSTITUTIONS**

**University of California, Davis – School of Veterinary Medicine**

*www.vetmed.ucdavis.edu/student_program*

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 $45,000.

**ADDITIONAL REQUIREMENTS FOR ADMISSION:** Three strong letters of evaluation, a personal statement, and an interview.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>(Any two additional classes)</td>
</tr>
<tr>
<td>HUMANITIES/ FINE ARTS (Any two-three additional classes)</td>
<td>8</td>
</tr>
<tr>
<td>SOCIAL/BEHAVIORAL SCIENCES (Any two-three additional classes)</td>
<td>8</td>
</tr>
</tbody>
</table>

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 2012: From an applicant pool of 1178 only 131 students were accepted. Of the 131 applicants accepted 123 had bachelor degrees only 8 had no degree. The average cumulative GPA was 3.56, required science 3.42. The average GRE scores were 588/79% on Verbal and 711/75% on Quantitative and 5.0/67% on Analytical Writing. The average number of Veterinary-related experience hours at the time of application was 3,025. 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 Los Angeles.

**Western University of Health Sciences – College of Veterinary Medicine**

*www.westernu.edu/wp/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. Students admitted in Fall 2008 had an average overall cumulative G.P.A. of 3.25 and the average prerequisite G.P.A. was 3.37. The class consisted of 104 students from 754 applications received. 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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;P 201</td>
<td>Human Physiology</td>
</tr>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology</td>
</tr>
</tbody>
</table>
BIOL 202 Molecular Biology/Genetics 4
ENGL 100 Freshman Composition 4
ENGL 155 Technical Writing 3

HUMANITIES / SOCIAL SCIENCES 6
MIRC 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, Mammology, 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
  http://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

CAREER OPPORTUNITIES:
Teaching
Private Practice
Research
Health and Welfare
Human Resources

TRANSFER MAJOR REQUIREMENTS

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

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
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<tbody>
<tr>
<td>PSYC 101</td>
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</table>

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

**California State University – Dominguez Hills**

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
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<tbody>
<tr>
<td>PSYC 210</td>
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<tr>
<td>or MATH 112</td>
<td>4</td>
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<tr>
<td>PSYC 220</td>
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**California State University – Long Beach**

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
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<tbody>
<tr>
<td>PSYC 210</td>
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<tr>
<td>or MATH 112</td>
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<tr>
<td>PSYC 220</td>
<td>4</td>
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<tr>
<td>PSYC 241</td>
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</table>

**California State University – Fullerton**

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
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<tbody>
<tr>
<td>PSYC 210</td>
<td>4</td>
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<tr>
<td>PSYC 220</td>
<td>4</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.

Psyc 241 Introduction to Psychobiology 3
Psyc 210 Elementary Statistics 4
or Math 112 Elementary Statistics (4)

University of California – Los Angeles
A&P 120 Introduction to Human Anatomy and Physiology 4
or Biol 120 Introduction to Biological Science (4)
or Biol 200 Principles of Biology (5)
Chem 100 Introductory Chemistry 4
or Chem 110 Elementary Chemistry (4)
or Chem 111 General Chemistry (5)
Psyc 210 Elementary Statistics 4
or Math 112 Elementary Statistics (4)

The UCLA Psychology Dept. prefers a statistics course to meet the quantitative reasoning major requirement.
or Math 115 Finite Mathematics (4)
or CS 280 Object-Orientated Programming in C++ (3)
or Math 170 Analytic Geometry and Calculus I (4)
or Math 116 Calculus for Managerial Biological and Social Sciences (4)
Phil 100 Introduction to Philosophy 3
or Phil 102 Introduction to Ethics (3)
or Phil 106 Introduction to Logic (3)
or Phil 103 Philosophical Reasoning: Critical Thinking in Philosophy (3)
Phys 100 Elementary Physics 4
or Phys 101 General Physics (4)
or Phys 201 Engineering Physics (4)

All preparatory courses listed must be completed by the spring before transfer. Changing majors into Psychology after admission to UCLA is not allowed.

University of California – Irvine

In fulfillment of the requirements below, a single course may be used only once.
Cis 280 Object-oriented Programming in C++ 3
and Cis 182 Java Programming 3.5
Math 170 Analytic Geometry & Calculus I 4
and Psyc 210 Elementary Statistics 4
or Math 112 Elementary Statistics (4)
and Psyc 101 General Introductory Psychology 3
and Psyc 241 Introduction to Psychobiology 3
and Psyc 261 Social Psychology 3
or Psyc 271 Abnormal Psychology (3)

One Course from:
Psyc 150 Personal and Social Adjustment 3
Psyc 210 Elementary Statistics (4)
Psyc 220 Research Methods (4)
Psyc 241 Introduction to Psychobiology (3)
Psyc 251 Developmental Psychology (3)
Psyc 261 Social Psychology (3)
Psyc 271 Abnormal Psychology (3)

Two of the following:
Psyc 100 Cultural Anthropology 3
or Psyc 115 Physical Anthropology (3)
Econ 101 US & Global Economy 3
Soc 101 Introductory Sociology Principles 3

University of California – Riverside
A) Psyc 210 Elementary Statistics 4
Psyc 220 Research Methods 4

B) Complete one course in mathematics, statistics, or computer science
(Any UC transferable course from one of these 3 disciplines is acceptable to fulfill this requirement. Psyc 210 will not double count for this requirement.)

NOTE: The following course is strongly recommended to fulfill this area, as it is a prerequisite to UCR’s Psyc 11 “Psychological Methods: Research Procedures”

Math 150 Precalculus Mathematics (4)

C) Complete one course in Biological Science
Biol 120 Introduction to Biological Science 4
Biol 200 Principles of Biology (5)
Biol 201 Principles of Biology (5)
Bot 120 Introduction to Plant Science (4)
and Zoology 120 Introduction to Animal Biology (4)

D) Complete one course in Physical Science
Astr 101 Elementary Astronomy 3
Astr 102 Introduction to Astronomy: Stars and the Universe (3)
Astr 103 Introduction to Astronomy: The Solar System (3)
Astr 106 History of Astronomy (3)
Chem 100 Introductory Chemistry (4)
Chem 111 General Chemistry (5)
and Chem 112 General Chemistry (5)
Phys 201 Engineering Physics (4)
and Phys 202 Engineering Physics (4)
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 units 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 units minimum and all A.A. degree general education requirements for a total of at least 60 units.
REAL ESTATE

CAREER OPPORTUNITIES:
Realtor
Teacher
Real Estate Financial Advisor
Loan Officer

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.

REAL ESTATE

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 DEPARTMENT AWARD - 12/13 UNITS

REQUIREMENTS

Class Completion Certificate 3 UNITS
Real Estate Department Award 12/13 UNITS
Real Estate Certificate of Achievement 18/20 UNITS
California Real Estate Certificate 25/26 UNITS
A.A. Degree in Real Estate 60 UNITS

REAL ESTATE DEPARTMENT AWARD - 12/13 UNITS

REQUIREMENTS

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

RE 101 Real Estate Principles 3
RE 173/174 Real Estate Occupational 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

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
ACCT 100 Introduction to Accounting 3
ACCT 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 Real Estate Occupational 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.
ASSOCIATE IN ARTS DEGREE REQUIREMENTS

The following Security Management Associate in Arts Degree Major Requirements 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AJ 101</td>
<td>Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>AJ 112</td>
<td>Introduction to Security Management</td>
<td>3</td>
</tr>
<tr>
<td>AJ 210</td>
<td>Legal Aspects of Security Management</td>
<td>3</td>
</tr>
<tr>
<td>AJ 211</td>
<td>Investigative Techniques for Security</td>
<td>3</td>
</tr>
<tr>
<td>AJ 212</td>
<td>Public Safety and Security Management</td>
<td>3</td>
</tr>
<tr>
<td>AJ 213</td>
<td>Public Safety Communications</td>
<td>3</td>
</tr>
<tr>
<td>AJ 214</td>
<td>Information Security</td>
<td>3</td>
</tr>
</tbody>
</table>

SIGN LANGUAGE

CAREER OPPORTUNITIES:
Interpreter
Instructor
Translator

VERIFICATION OF COMPLETION

<table>
<thead>
<tr>
<th>Division/Department Requirements</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>SL 101 Beginning American Sign Language</td>
<td>3</td>
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<tr>
<td>SL 102 Intermediate American Sign Language</td>
<td>3</td>
</tr>
<tr>
<td>SL 201 Advanced American Sign Language</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 120 Fundamentals of Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 271 Voice and Articulation</td>
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</tr>
</tbody>
</table>

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

CAREER OPPORTUNITIES:
Health and Mental Health Care
Child Welfare
Family Services
Government Services

(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 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 – Dominguez Hills

No other requirements other than the common lower division preparation.

California State University – Fullerton

A total of 9 units of lower division sociology course work may be transferred. Concentration in Gerontology:

- SOC 250 Sociology of Aging 3

All courses counting toward the major must be taken for a letter grade. SOC 101 must be completed with a C or better 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 CSUGE critical thinking requirement. This will also 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 – Irvine

SOC 201 Social Problems 3

Recommended Elective:

- ANTH 100 Cultural Anthropology 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.

SOCIOLOGY

CAREER OPPORTUNITIES:

- Consultant
- Public Relations
- Non-Profit Organizations
- Professor/Teacher
- Social Services
- Community Development
- Public Administration

See Plan B General Education Requirements.
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 280** Object-Oriented Programming in C++ 3
and **CIS 182** Java Major 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 with a minimum grade of C.

**University of California — Riverside**

Two additional lower division sociology courses. Any UC transferable sociology course is acceptable. All courses in the major must be taken for a letter grade.

**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 units minimum and all AA degree general education requirements for a total of at least 60 units.

**SPANISH**

**CAREER OPPORTUNITIES:**
Overseas Personnel in American Corporations
Airline Hostess
Travel Agency Personnel
Government Positions Abroad
Teaching
Librarian
Interpreter
Translator

**TRANSFER MAJOR REQUIREMENTS**

**COMMON LOWER DIVISION MAJOR PREPARATION**

FOR CALIFORNIA STATE UNIVERSITY

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>SPAN 101</td>
<td>Elementary Spanish</td>
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<tr>
<td>SPAN 102</td>
<td>Elementary Spanish</td>
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<tr>
<td>SPAN 201</td>
<td>Intermediate Spanish</td>
<td>5</td>
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<tr>
<td>SPAN 202</td>
<td>Intermediate Spanish</td>
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**ADDITIONAL LOWER DIVISION MAJOR PREPARATION**

FOR SPECIFIC TRANSFER INSTITUTIONS

**California State University — Fullerton**

The common lower division preparation for the California State University 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 3
  or **SPAN 282** Intermediate Conversational Spanish (3)
  or **SPAN 283** Advanced Conversational Spanish (3)
- **SPAN 213** Living Spanish Grammar and Written Communication (2)
  or **SPAN 214** Living Spanish Grammar and Written Communication (2)

**California State University — Long Beach**

One year of intermediate Spanish at the university level or equivalent is required. 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 Pass/No Pass basis.

**California State University — Los Angeles**

No additional requirements other than the common lower division preparation previously listed for the California State University. Students must have completed the second year of college-level Spanish prior to beginning the BA Program. 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.

**COMMON LOWER DIVISION MAJOR PREPARATION**

FOR UNIVERSITY OF CALIFORNIA

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>SPAN 101</td>
<td>Elementary Spanish</td>
<td>5</td>
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</table>
and **SPAN 102** Elementary Spanish 5
| SPAN 201 | Intermediate Spanish                       | 5     |
and **SPAN 202** Intermediate Spanish 4

**ADDITIONAL LOWER DIVISION MAJOR PREPARATION**

FOR SPECIFIC TRANSFER INSTITUTIONS

**University of California — Irvine**

All students must adhere to the placement policies listed in the UCI General Catalog. Students with prior knowledge of Spanish may need to take the Spanish placement test.

In addition to the common lower division major preparation for University of California previously listed, at least one course is required from four different areas (writing, literature, history, and philosophy). An approved list of courses is available from ASSIST. Please consult a counselor, if necessary, for these additional classes.

This major does not require the completion of certain prerequisites for admission as a transfer student.
University of California – Los Angeles

UCLA offers Spanish as a major although no formal articulation exists. Students are recommended to complete the common lower division major preparation for the University of California prior to admission.

In addition, one Spanish civilization course, and one Spanish American civilization course is required prior to admission.

University of California – Riverside

No additional requirements other than the common lower division major preparation for University of California previously listed. Intermediate level proficiency in Spanish is required.

Completion of the above course work 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.

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.

SPEECH

CAREER OPPORTUNITIES:
Public Relations
Sales
Teaching
Law
Politics
Administration
Communications
Consulting
Broadcasting

TRANSFER MAJOR REQUIREMENTS

LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Fullerton
Bachelor of Arts in Speech Communication, Human Communication Studies.
SPCH 130 Fundamentals of Speaking 3
SPCH 235 Fundamentals of Argumentation and Persuasion 3
For Bachelor of Arts in Communication – see a counselor

California State University – Long Beach
Bachelor of Arts in Communication Studies
Communication Studies and Options in Interpersonal & Organizational Communication, and Communication, Culture & Public Affairs.

12 lower division units to include the following courses
SPCH 100 Fundamentals of Oral Communication 3
or SPCH 120 Fundamentals of Interpersonal Communication 3

California State University – Los Angeles
Bachelor of Arts – Communication

Core Requirements
SPCH 100 Fundamentals of Oral Communication 3
SPCH 235 Argumentation and Persuasion 3

Two courses from:
SPCH 120 Fundamentals of Interpersonal Communication 3
SPCH 132 Fundamentals of Small Group Communication 3
SPCH 140 Oral Interpretation of Literature 3
SPCH 239 Forensics Workshop 2
SPCH 240 Oral Interpretation: Reader’s Theatre 3

For single subject teaching option – see a counselor

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.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Complete the above lower division requirements plus other courses selected in consultation with a counselor to provide for the 18 units minimum and all AA degree general education requirements for a total of at least 60 units

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
Choose 9 units from any of the following courses

SPCH 100 Fundamentals of Oral Communication 3
SPCH 110 Intercultural Communication 3
SPCH 120 Fundamentals of Interpersonal Communication 3
SPCH 130 Fundamentals of Speaking 3
SPCH 132 Fundamentals of Small Group Communication 3
SPCH 140 Oral Interpretation of Literature 3
SPCH 145 Storytelling 3
SPCH 150 Organizational Communication 3
SPCH 200 Contemporary Communication Topics 3
SPCH 235 Fundamentals of Argumentation and Persuasion 3
*SPCH 236 Forensics for One Tournament 1
*SPCH 237 Forensics for Two Tournaments 1
*SPCH 238 Forensics for Three Tournaments 1
*SPCH 239 Forensics Workshop 2
SPCH 271 Voice and Articulation 3

*Up to 3 forensics units may be used toward the speech certificate

TOTAL VERIFICATION REQUIREMENTS: 9
### SPEECH-LANGUAGE PATHOLOGY AIDE

**CERTIFICATE OF ACHIEVEMENT**

A Certificate of Achievement shall be awarded to the student who completes with a grade of "C" or better the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 110</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CD 139</td>
<td>Observation, Assessment, and Positive Guidance of Childhood Behavior</td>
<td>3</td>
</tr>
<tr>
<td>CDSE 50</td>
<td>Survey of Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SLP 100</td>
<td>Introduction to Speech and Language Pathology</td>
<td>3</td>
</tr>
<tr>
<td>SLP 110</td>
<td>Normal Communication, Disorders and Differences</td>
<td>4</td>
</tr>
<tr>
<td>SLP 125</td>
<td>Childhood Disorders and Treatment</td>
<td>5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS**

21

**CAREER OPPORTUNITIES:** Upon completion of the courses, employment is available in educational setting where the aide will be supervised by a licensed Speech-Language Pathologist.

### SPEECH-LANGUAGE PATHOLOGY ASSISTANT

The Speech-Language Pathology Assistant curriculum prepares graduates to work under the supervision of a licensed Speech-Language Pathologist, who evaluates, diagnoses, and treats individuals with various communication disorders. The program provides a concentration of speech-language classes, related courses, and supervised field experiences that will prepare students to assist speech-language pathologists in treating disorders related to articulation and phonology, anomalies and hearing. In addition, students will be trained in the use of alternative and augmentative communication.

Courses provide instruction in methods of screening for speech, language, and hearing disorders and in following written protocols designed to remediate individual communication problems. Students are placed in supervised field experiences in school, hospital, and rehabilitation settings to work with different types and ages of clients.

Graduates will be eligible to apply for licensure with the California Speech-Language Pathology and Audiology Board. Employment opportunities exist in health care and education settings where the Speech-Language Pathology Assistant must be supervised by a licensed Speech-Language Pathologist.

### CRIMINAL BACKGROUND CHECK

Clearance of a criminal background check may be required prior to field experience. Students who do not clear agency requirements are not eligible for clinical placement and will, consequently, be ineligible to continue in the course. If there is any concern regarding clearance of a criminal background check, please contact the Health Occupations Division for additional information.

### ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

A minimum of 60 degree applicable units including the following required courses completed with a grade of "C" or better must be completed to qualify for the A.A. Degree.

#### REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCD 110</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 113</td>
<td>The Child, Family, and Community</td>
<td>3</td>
</tr>
<tr>
<td>EDT 104</td>
<td>Word Processing for Educators</td>
<td>2</td>
</tr>
<tr>
<td>SLP 100</td>
<td>Introduction to Speech-Language Pathology</td>
<td>3</td>
</tr>
<tr>
<td>SLP 110</td>
<td>Normal Communication, Disorders and Differences</td>
<td>4</td>
</tr>
</tbody>
</table>

#### First Year

**Second Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 139</td>
<td>Observation, Assessment, and Positive Guidance of Childhood Behavior</td>
<td>3</td>
</tr>
<tr>
<td>CDSE 50</td>
<td>Survey of Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 271</td>
<td>Voice and Articulation</td>
<td>3</td>
</tr>
<tr>
<td>SLP 120</td>
<td>Phonetics Lab</td>
<td>.5</td>
</tr>
<tr>
<td>SLP 125</td>
<td>Childhood Disorders and Treatment</td>
<td>5</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE REQUIREMENTS:**

14.5

See Cerritos College Graduation Requirements

Individuals holding B.A. in Communication Disorders should make an appointment with the SLPA Department Chair prior to enrollment in SLP 240 and SLP 245. Enrollment is contingent upon satisfactory completion of the placement process.

### TEACHING CREDENTIAL PREPARATION

#### CAREER PATHWAY

**CAREER OPPORTUNITIES:**

Teacher Secondary and Elementary Administration

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 approved Professional Teacher Induction program thorough an approved school district, county office of education, college or university, consortium or private school. At that point, an application for a Professional Clear Teaching Credential is submitted through the approved sponsoring Induction program. For more information, log on to the California Commission on Teaching Credentialing Web site at [www.ctc.ca.gov](http://www.ctc.ca.gov) and the TEACH California Web site [www.teachcalifornia.org](http://www.teachcalifornia.org).
SINGLE SUBJECT TEACHING CREDENTIAL
(Primarily for Middle and Secondary Schools)

This credential authorizes public school teaching in specific subjects in a departmentalized classroom such as those in most middle schools or high schools. Teaching in these subjects may be authorized for preschool, kindergarten, grades 1-5, and classes organized primarily for adults.

A candidate lacking this major background may validate competency by passing a California Subject Examination for Teachers (CSET) in a specified subject matter category. No minor is required.

MULTIPLE-SUBJECT TEACHING CREDENTIAL
(Liberal Studies/Elementary School Teaching)

This credential authorizes teaching in a public school self-contained classroom such as the classrooms in most elementary schools. However teaching preschool, kindergarten, grades 1-12, and classes organized primarily for adults may also be assigned.

Completion of the courses recommended below will partially satisfy requirements for the Liberal Studies elementary school teaching option offered at the indicated CSUs 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 enactment of the No Child Left Behind federal regulations, school districts are requiring a passing score on the California Subject Examination for Teachers (CSET) for all new teachers. 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, visit the CSET Web site at www.cset.nesinc.com.

Students who wish to choose a academic major other than Liberal Studies in order to prepare for elementary school teaching should schedule an appointment with a counselor.

Students who choose a liberal studies major in order to benefit from a broad interdisciplinary liberal arts education and do not wish to pursue elementary school teaching should see a Cerritos College counselor for advisement. Requirements may vary from those listed below.

An Associate in Arts Degree in liberal studies is not available at Cerritos College.

CBEST

It is recommended that students seeking a teaching credential take the CBEST (California Basic Educational Skills Test) the semester before transferring to a university. The CBEST is an entrance requirement for most university credential program. 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. For test information, log on to www.cbest.nesinc.com.

COMMON LOWER DIVISION PREPARATION FOR THE CALIFORNIA STATE UNIVERSITY

See individual CSU’s listed below for additional courses.

- Speech 130
- English 100
- English 103
- Biology 120
- Earth Science 110
- Math 110A and 110B (Except CSUF)
- Music 105 (Except CSULA)
- History 102
- Political Science 101
- Geography 105 (Except CSULA)
- History 120 (Except CSULA and CSUDH)
- History 245 (Except CSULA)
- Child Development 110

California State University-Dominguez Hills

Important Notice: Requirements may be updated. New students beginning to take courses for transfer to the Liberal Studies program should consult with a counselor or contact the Liberal Studies program for current information at (310) 243-3832 or visit their Web site at www.csudh.edu/soe/lbs_1/index.htm.

- Speech 100,120,130,132, or 150
- English 100
- English 103
- Any Plan B Physical Science (ESCI 110, PS 112, or any Astronomy recommended)
- Biology 120
- Math 110A
- Math 110B
- Art 100 or Theatre 101
- Music 105 or Dance 101
- English 222
- History 102 or 103
- Political Science 101 or 201
- Geography 105
- History 245
- Child Development 110

Suggested additional courses: Math 105, Sociology 102, and Health Education 100
Curriculum and Requirements for Majors, Certificates and Transfer Programs

Liberal Studies (B.A.): Integrated Option

The Liberal Studies Integrated Option (INTOP) makes available an accelerated program combining the requirements for a bachelor 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 an elementary school teacher in multiple ways at CSU Fullerton. They can major in Child and Adolescent Development, Liberal Studies, or other majors and complete the general education classes that will best prepare them for the CSET examination, as recommended by CSUF’s Center for Careers in Teaching (CTC). With completion of a B.A. and other established requirements, they would be ready to enter a two to three semester traditional teaching credential program. For the major courses required by Child and Adolescent Development or Liberal Studies Departments, please see a counselor or consult the (CCT) Web site at www.fullerton.edu/cct or the ASSIST Web site at www.assist.org. Another program option for transferring students is to major in Child and Adolescent Development, Liberal Studies or Religious Studies and complete the STEP curriculum (see description of STEP below).

Streamline Teacher Education Major Requirements (STEP)

STEP is the Streamlined Teacher Education program designed for students to earn their bachelor degree and Multiple Subject Credential in a reduced number of units. The courses below and grade point average (GPA) for this program are very specific. Some courses require a specific grade.

Speech 100, 120, 130 (preferred), 132, or 150
English 100
English 101, 103, Philosophy 103, 106, Psychology 103, Read 200, or Speech 235
Chemistry 105
Earth Science 110
Physical Science 112
Biology 120
Any Math course from area B.3*
Music 100,105, or Theatre 101
English 106
English 222
Humanities 100
History 102
Political Science 101
Geography 105
History 120
History 245
Child Development 110 or Psychology 251
Education/Elementary School Teachers 100+
Education/Elementary School Teachers 200+

+ Courses are restricted to official Teacher TRAC students only.

+++For the latest information or clarification about program, either call the Center for Careers in Teaching at (714-278-7130) or check the CCT Web site at www.fullerton.edu/cct. Community college students are advised to attend an information seminar at CSUF. Students are advised to bring transcripts. Information seminar dates are on the Web site.

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 ISTEP 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 enrolling 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 at 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
Philosophy 100, 102, or 200
English 103, Philosophy 103, 106, or Speech 235
English 102, 230A, 230B, 246A, 246B, 248A, or 248B

+Courses are restricted to official Teacher TRAC students only.

+++Optional but highly recommended to prepare for the science portion of the CSET exam and/or to add a middle school science authorization.
Traditional Curriculum

The following courses meet lower division requirements for the traditional teacher preparation program consisting of a B.A. and yearlong credential program. Teacher TRAC requirements differ from those below.

Speech 130
English 100
English 103, Philosophy 103, 106, or Speech 235
Earth Science 110 or Geology 101
Physical Science 112
Biology 120
Math 105
Math 110A
Math 110B
Music 105
Theatre 101 or Dance 101
English 102, 230A, 230B, 246A, 246B, 248A, or 248B
Philosophy 100, 102, or 200
History 102
Political Science 101 or 201
Geography 105
History 120
History 245
Child Development 110
Educational Technology 110

NOTE: CSULB WAIVES AREA E* FOR TEACHER TRAC/ITEP AND TRADITIONAL LIBERAL STUDIES MAJORS

*REFERS TO DESIGNATED AREAS OF THE CSU GENERAL EDUCATION CERTIFICATION REQUIREMENTS

University Of California-Riverside

English 100
English 101,103, Philosophy 103, Psychology 103, or Speech 235
Math 150+ or Math 114+ and Math 140 (Not UC transferable but when taken with Math 114 will meet major requirement)
Art 110, 130A, or 136
Dance 105
Music 101
Theatre 101 or 110
English 106
English 230A
English 248A
Anthropology 100
Anthropology 203
History 102
History 245
History 246
Political Science 101
Sociology 101
Geography 101 and 101L
Biology120
Health Education 100
Women's Studies 101, 205, Anthropology 205, or Psychology 265
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 Pass limitation. See counselor for details.

For additional information, please check the ASSIST Web site at www.assist.org.

THEATRE ARTS

CAREER OPPORTUNITIES:

Actor/Actress
Boom Microphone Operator
Camera Operator/Assistant
Cinematographer*
Costumer
Director/Assistant Director*
Film Editor*
Film Exhibition
Gaffer/Grip
Hair/Makeup Artist
Light Technician*
Production Assistant
Prop Master/Prop Assistant
Operator Screenwriter/Playwright*
Set Designer
Sound Engineer/Mixer
Stage Manager/Technician
Storyboard Artist*
Teacher/Professor*
Theatre Manager
Videographer

*Bachelor's degree normally required

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

MAJOR REQUIREMENTS

ACTING OR TECHNICAL EMPHASIS 32 UNITS MINIMUM

TH 101 Introduction to the Theatre
TH 102 History of the Classical Theatre
TH 103 History of the Modern Theatre
TH 110 Fundamentals of Acting
TH 130 Rehearsal/Performance for the Minor Role
TH 131 Rehearsal/Performance for the Supporting Role
TH 132 Rehearsal/Performance for the Leading Role
TH 133 Stage Crew Activity
TH 134 Technical Production

CHOOSE ONE:

TH 111 Intermediate Acting to Characterization
TH 114 Voice for Acting
TH 115 Stage Movement and Combat

CHOOSE TWO:

TH 120 Theatre Stagecraft
TH 221 Costuming for the Stage
TH 222 Stage Lighting

PLUS SIX (6) UNITS FROM AT LEAST TWO OF THE FOLLOWING:

TH 108 Improvisation for the Theatre
TH 111 Intermediate Acting to Characterization
TH 114 Voice for Acting
TH 115 Movement for the Actor
TH 120 Theatre Stagecraft
TH 123 Stage Make-Up
TH 136 Touring Theatre Production for Leading Roles
TH 212 Scene Study
TH 213 Historical Styles of Acting
TH 221 Costuming for the Stage
TH 222 Stage Lighting
TH 226 Introduction to Scene Design
MUS 146 Recording Techniques

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
TRANSFER MAJOR REQUIREMENTS
LOWER DIVISION MAJOR PREPARATION
FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills

<table>
<thead>
<tr>
<th>TH 101</th>
<th>Introduction to the Theatre</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 110</td>
<td>Fundamentals of Acting</td>
<td>3.5</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>TH 101</th>
<th>Introduction to the Theatre</th>
<th>3</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>and TH 115</td>
<td>Stage Movement and Combat</td>
<td>3</td>
</tr>
<tr>
<td>TH 120</td>
<td>Theatre Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>or TH 221</td>
<td>Costuming for the Stage</td>
<td>(3)</td>
</tr>
<tr>
<td>or TH 226</td>
<td>Introduction to Scenic Design</td>
<td>(2)</td>
</tr>
<tr>
<td>TH 123</td>
<td>Stage Make-Up</td>
<td>3</td>
</tr>
<tr>
<td>TH 212</td>
<td>Scene Study</td>
<td>3.5</td>
</tr>
<tr>
<td>SPCH 140</td>
<td>Oral Interpretation of Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

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>TH 101</th>
<th>Introduction to the Theatre</th>
<th>3</th>
</tr>
</thead>
<tbody>
<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>

California State University – Long Beach

| TH 110 | Fundamentals of Acting  | 3.5 |
| TH 115 | Stage Movement and Combat | 3 |
| TH 120 | Theatre Stage Craft      | 3 |
| TH 123 | Stage Make-Up            | 3 |
| TH 221 | Costuming for the Stage  | 3 |
| TH 222 | Stage Lighting           | 3 |

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>TH 102</th>
<th>History of the Classical Theatre</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>and 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>and 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>or TH 222</td>
<td>Stage Lighting</td>
<td>(3)</td>
</tr>
<tr>
<td>or 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:

Fall Admissions only. There will be no mid-year admissions. Admission requirements include required supplemental materials such as a questionnaire, personal essay, resume, an audition/interview and a writing sample. All applicants must meet the admissions standards of UCLA and the departmental screening process. There will also be a $50 fee for all auditions/interviews. Applicants may submit materials for consideration in one or more of the following areas: acting, design and production, directing, history and criticism, musical theatre, and playwriting. For more information see http://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.
WELDING

CAREER OPPORTUNITIES:
Welder
Welding Inspector
Welding Technician
Pipe Fitter
Sheet Metal Mechanic
Maintenance Mechanic

CERTIFICATE OF ACHIEVEMENT REQUIREMENTS
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>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 39</td>
<td>Welding Shop Math</td>
<td>2</td>
</tr>
<tr>
<td>WELD 50</td>
<td>Blue Print Reading for the Welding Trades</td>
<td>3</td>
</tr>
<tr>
<td>WELD 120</td>
<td>Beginning Arc Welding</td>
<td>4</td>
</tr>
<tr>
<td>WELD 170</td>
<td>Structural Fabrication</td>
<td>2</td>
</tr>
<tr>
<td>or WELD 53</td>
<td>Pipe Layout</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</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>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 200</td>
<td>Intermediate Arc Welding</td>
<td>4</td>
</tr>
<tr>
<td>WELD 210L</td>
<td>Arc Welding Applications</td>
<td>2</td>
</tr>
<tr>
<td>WELD 220</td>
<td>Certification and Licensing for Welders</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>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 130</td>
<td>Gas Tungsten Arc Welding Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>WELD 240</td>
<td>Advanced Gas Tungsten Arc Welding Lab (2 labs required)</td>
<td>4</td>
</tr>
<tr>
<td>WELD 250L</td>
<td>Gas Tungsten Arc Welding Applications (2 labs required)</td>
<td>4</td>
</tr>
</tbody>
</table>

NOTE: The student must also pass the ASME section IX6G performance exam available through the Welding Department.

PIPE WELDING OPTION

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 52</td>
<td>Pipe Welding Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>WELD 54L</td>
<td>Advanced Pipe Welding</td>
<td>2</td>
</tr>
<tr>
<td>WELD 200</td>
<td>Intermediate Arc Welding</td>
<td>4</td>
</tr>
<tr>
<td>WELD 210L</td>
<td>Arc Welding Applications</td>
<td>2</td>
</tr>
</tbody>
</table>

NOTE: 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

WELDING FABRICATION AND LAYOUT

CERTIFICATE OF ACHIEVEMENT REQUIREMENTS

<table>
<thead>
<tr>
<th>COURSE</th>
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<tr>
<td>WELD 50</td>
<td>Blue Print Reading for the Welding Trades</td>
<td>3</td>
</tr>
<tr>
<td>WELD 53</td>
<td>Pipe Layout</td>
<td>2</td>
</tr>
<tr>
<td>WELD 120</td>
<td>Beginning Arc Welding</td>
<td>4</td>
</tr>
<tr>
<td>WELD 170</td>
<td>Structural Fabrication</td>
<td>2</td>
</tr>
<tr>
<td>WELD 200</td>
<td>Intermediate Arc Welding</td>
<td>4</td>
</tr>
<tr>
<td>WELD 270</td>
<td>Structural Layout</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CERTIFICATE REQUIREMENTS: 20

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 100

WILDLIFE MANAGEMENT AND CONSERVATION

CAREER OPPORTUNITIES:
Wildlife Management
Fish and Game Agencies
Fisheries
Biology

TRANSFER MAJOR REQUIREMENTS

LOWER DIVISION MAJOR PREPARATION
FOR HUMBOLDT STATE UNIVERSITY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Elementary Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 111*</td>
<td>General Chemistry</td>
<td>(5)</td>
</tr>
<tr>
<td>and 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>MATH 150</td>
<td>Precalculus Mathematics</td>
<td>4</td>
</tr>
</tbody>
</table>

* If CHEM 111 and CHEM 112 are taken, courses must be taken with a letter grade only. Pass/No Pass will not be accepted. Course must be completed with a grade of “C” or higher. Also, if CHEM 111 and CHEM 112 are taken, PHYS 101 will not be required.

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.
**WOMEN’S STUDIES**

**CAREER OPPORTUNITIES:**
Professor  
Writer

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS**

**MAJOR REQUIREMENTS**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS 101</td>
<td>Issues for Women in American Society (Women's Studies)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two courses from this section (6 units):

**Global Emphasis:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>Cultural Anthropology (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 205</td>
<td>The Anthropology of Sexuality and Gender (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ART 109/HUM 109</td>
<td>Gender and Sexuality in Art (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Women in Global Economy (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 236</td>
<td>Studies in Women's Literature (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 103</td>
<td>Critical Thinking and Argumentative Writing (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>WS 102</td>
<td>Women and Religion (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>WS 205</td>
<td>Sexuality and Gender (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>WS 206</td>
<td>Women in the Global Economy</td>
<td>3</td>
</tr>
</tbody>
</table>

Select at least 9 units from this section:

**U.S. Emphasis:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 202</td>
<td>Principles of Microeconomics (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition (Women's Studies)</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 224</td>
<td>Native American Literature (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>HED 103/WS 103</td>
<td>Women, Their Bodies and Health (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 204/WS 204</td>
<td>Women in American History (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>PE 106 or WS 106</td>
<td>Women in Sports (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>PE 160</td>
<td>Personal Self Defense (Women's Studies)</td>
<td>1</td>
</tr>
<tr>
<td>POL 101</td>
<td>American Political Institutions (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 265</td>
<td>Psychology of Gender (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 120</td>
<td>Fundamentals of Interpersonal Communication (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introductory Sociology Principles (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 202/WS 202</td>
<td>Gender in Society (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Marriage and the Family (Women's Studies)</td>
<td>3</td>
</tr>
<tr>
<td>WS 104</td>
<td>Community Organizing and Activism (Women's Studies)</td>
<td>3</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

To qualify for a degree in Women's Studies, students must take courses listed above that are designated as having Women's Studies emphasis and complete all AA degree general education requirements for a total of at least 60 units.

**WOODWORKING MANUFACTURING TECHNOLOGIES**

**CAREER OPPORTUNITIES:**
Woodworking  
Construction  
Designer

**CERTIFICATE OF ACHIEVEMENT MAJOR REQUIREMENTS**

**WMT BASIC CORE COURSE**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 101</td>
<td>Introduction to Woodworking</td>
<td>3</td>
</tr>
<tr>
<td>WMT 102</td>
<td>Introduction to Solid Wood Casegoods</td>
<td>4</td>
</tr>
<tr>
<td>WMT 103</td>
<td>Introduction to Tables</td>
<td>4</td>
</tr>
<tr>
<td>WMT 107</td>
<td>Wood Finishing</td>
<td>3</td>
</tr>
<tr>
<td>WMT 118</td>
<td>Introduction to Woodturning</td>
<td>2</td>
</tr>
<tr>
<td>WMT 130</td>
<td>Furniture Design</td>
<td>3</td>
</tr>
<tr>
<td>WMT 151</td>
<td>Introduction to Faceframe Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 153</td>
<td>Introduction to 32mm System of Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 155</td>
<td>Architectural Millwork</td>
<td>4</td>
</tr>
<tr>
<td>WMT 181</td>
<td>Introduction to Computer Operations for Cabinetmaking and Design</td>
<td>3</td>
</tr>
<tr>
<td>WMT 201</td>
<td>Woodworking with Hand Tools</td>
<td>4</td>
</tr>
</tbody>
</table>

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.

**RECOMMENDED ELECTIVES:** WMT 120, WMT 123, WMT 132, WMT 134, WMT 148, WMT 153, WMT 171, WMT 202, WMT 211, WMT 212, WMT 237, WMT 243, WMT 248, WMT 249L, WMT 251, WMT 253, WMT 268, WMT 281.

**CABINETMAKING**

**CERTIFICATE OF ACHIEVEMENT REQUIREMENTS**

**WMT BASIC CORE COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 107</td>
<td>Wood Finishing</td>
<td>3</td>
</tr>
<tr>
<td>WMT 151</td>
<td>Introduction to FaceFrame Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 153</td>
<td>32mm System of Cabinetmaking</td>
<td>4</td>
</tr>
<tr>
<td>WMT 155</td>
<td>Architectural Millwork</td>
<td>4</td>
</tr>
<tr>
<td>WMT 181</td>
<td>Introduction to Computer Operations for Cabinetmaking and Design</td>
<td>3</td>
</tr>
<tr>
<td>WMT 250</td>
<td>Intermediate FaceFrame Cabinetmaking</td>
<td>4</td>
</tr>
</tbody>
</table>
WMT 252 Intermediate 32mm System Cabinetmaking 4
WMT 268 Production Cabinetmaking 5
A,B, or C

**CHOOSE FROM THE FOLLOWING FOR A MINIMUM OF (6) UNITS:**
WMT 102 Introduction to Solid Wood Casegoods 4
WMT 157 Passage Door 4
WMT 159 Solid Surface Fabrication 3
WMT 201 Woodworking with Hand Tools 4
WMT 203 Wood Veneering 4
WMT 251 Advanced FaceFrame Cabinetmaking 4
WMT 253 Advanced 32mm System of Cabinetmaking 4
WMT 258 Mantels and Wall Systems 4

**TOTAL CERTIFICATE UNITS** 37

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**
Complete 60 units to include the above Certificate of Achievement requirements, the Associate in Art Degree requirements, and electives as needed.

**RECOMMENDED ELECTIVES:** WMT 159, WMT 201, WMT 258

**FURNITURE MAKING**

**CERTIFICATE OF ACHIEVEMENT**

**WMT BASIC CORE COURSE**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 101</td>
<td>3</td>
</tr>
<tr>
<td>WMT 102</td>
<td>4</td>
</tr>
<tr>
<td>WMT 103</td>
<td>4</td>
</tr>
<tr>
<td>WMT 107</td>
<td>3</td>
</tr>
<tr>
<td>WMT 130</td>
<td>3</td>
</tr>
<tr>
<td>WMT 132</td>
<td>4</td>
</tr>
<tr>
<td>WMT 201</td>
<td>4</td>
</tr>
</tbody>
</table>

**AND NINE (9) UNITS SELECTED FROM THE FOLLOWING COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMT 115</td>
<td>2</td>
</tr>
<tr>
<td>WMT 118</td>
<td>2</td>
</tr>
<tr>
<td>WMT 137</td>
<td>2.5</td>
</tr>
<tr>
<td>WMT 202</td>
<td>4</td>
</tr>
<tr>
<td>WMT 203</td>
<td>3</td>
</tr>
<tr>
<td>WMT 204</td>
<td>4</td>
</tr>
<tr>
<td>WMT 211</td>
<td>4</td>
</tr>
<tr>
<td>WMT 233</td>
<td>4</td>
</tr>
<tr>
<td>WMT 241</td>
<td>2</td>
</tr>
<tr>
<td>WMT 244</td>
<td>4</td>
</tr>
<tr>
<td>WMT 246</td>
<td>4</td>
</tr>
<tr>
<td>WMT 248</td>
<td>4</td>
</tr>
<tr>
<td>WMT 258</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL CERTIFICATE UNITS** 34

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**
Complete 60 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 2488

**ZOOLEGY**

**CAREER OPPORTUNITIES:**
Teaching in Secondary Schools  
Federal and State Civil Service  
Research Laboratories  
Natural Museums and Zoos  
Veterinarian  
Park Naturalist  
Health Professions

**TRANSFER MAJOR REQUIREMENTS**

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Principles of Biology 5</td>
</tr>
<tr>
<td>BIOL 201</td>
<td>Principles of Biology 5</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry 5</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry 5</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics 4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics 4</td>
</tr>
</tbody>
</table>

**AND UNIVERSITY OF CALIFORNIA UNITS**

**California State University — Long Beach**

**(Option within the Biology major)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 200</td>
<td>Principles and Applications of Microbiology 5</td>
</tr>
<tr>
<td>or GEOL 101</td>
<td>Physical Geology (4)</td>
</tr>
<tr>
<td>or ESCI 110</td>
<td>Introduction to Earth Science (4)</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Analytic Geometry and Calculus I 4</td>
</tr>
<tr>
<td>or MATH 116</td>
<td>Calculus for Managerial, Biological and Social Sciences (4)</td>
</tr>
<tr>
<td>MATH 190</td>
<td>Analytic Geometry and Calculus II 4</td>
</tr>
</tbody>
</table>

The Zoology major at CSULB includes additional lower division courses not articulated with Cerritos College.

**California State Polytechnic University — Pomona**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 211</td>
<td>Organic Chemistry 5</td>
</tr>
<tr>
<td>CHEM 212</td>
<td>Organic Chemistry 5</td>
</tr>
<tr>
<td>ENGL 100</td>
<td>Freshman Composition 4</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Freshman Composition and Literature 3</td>
</tr>
<tr>
<td>or ENGL 103</td>
<td>Critical and Argumentative Writing (3)</td>
</tr>
<tr>
<td>HED 100</td>
<td>Contemporary Health Problems 3</td>
</tr>
<tr>
<td>or PSYC 101</td>
<td>General Introductory Psychology (3)</td>
</tr>
<tr>
<td>or PSYC 150</td>
<td>Personal and Social Adjustment (3)</td>
</tr>
<tr>
<td>or PSYC 241</td>
<td>Introduction to Psychobiology (3)</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Elementary Statistics 4</td>
</tr>
<tr>
<td>or PSYC 210</td>
<td>Elementary Statistics (4)</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus for Managerial, Biological and Social Sciences 4</td>
</tr>
</tbody>
</table>

The Zoology major at Cal Poly Pomona includes additional lower division courses not articulated with Cerritos College.
University of California – Santa Barbara

MATH 116  Calculus for Managerial, Biological and Social Sciences  4

or 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

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.
Non-Credit Certificates And Verifications Of Completion

Certificates and Verifications of Completion

Non-Credit Certificate of Completion of Courses in Building Trades and Construction Industry

Pre Apprenticeship

Certificate of Achievement

Division/Department Requirements:

AED 36.02  Introduction to the Building Trades and Construction Industry
AED 36.03  Basic Reading Skills for the Building Trades and Construction Industry
AED 36.04  Basic Math Skills for the Building Trades and Construction Industry
AED 36.05  Introduction to Basic Welding for the Building Trades and Construction Industry

Total Certificate Requirements: 4 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. The CAN designation for Cerritos College courses is listed in the catalog with course descriptions. (See ACCT 101).

The CAN system is being phased out. California State University (CSU) campuses will no longer list CAN numbers in their catalogs and neither will ASSIST, the official repository of course articulation information. The use of CAN numbers are recommended to be used primarily for the CSU Lower-Division Transfer Pattern (LDTP) program and for courses transferred between participating community colleges.

Because the CAN system is being phased out, the use and acceptance of CAN numbers by CSU campuses for use other than for the LDTP program is up to each campus. The same caveat would apply to California Community College Campuses. It is recommended that interested students check with the receiving institution on their individual campus policy.

Additional information can be obtained from Cerritos College's Articulation Officer in the Counseling Department.

**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 EDUCATION DIVISION
(562) 860-2451 EXT. 2715
Accounting
Business Administration
Business Communications
Business Computerized Office Technologies
Finance
Insurance
Law
Paralegal
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
Journalism
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

HPED/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
Interdisciplinary Studies
Philosophy
Political Science
Psychology
Sociology
Women’s Studies

INNOVATION AND ACADEMIC SUPPORT
(562) 860-2451 EXT. 2797
Educational Technology

LIBERAL ARTS DIVISION
(562) 860-2451 EXT. 2858
Chinese
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
Engineering Design Technology
Machine Tool Technology
Manufacturing Technology
New Product Development
Plastics Manufacturing
Technical Mathematics
Welding
Woodworking Manufacturing Technologies
ACCOUNTING
(Business Education Division)

ACCT 1T (Not Degree Applicable)
ACCOUNTING MICROCOMPUTER TUTORIAL 0.5 UNIT
Class hours: 2.0 Laboratory
Open Entry/Open Exit
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
Open Entry/Open Exit
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
Open Entry/Open Exit
Corequisite: ACCT 100, ACCT 101, or ACCT 102.
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 will apply skills learned in tax preparation while providing a much-needed service to their community. (Formerly BUSA 51)

ACCT 60
QUICKBOOKS ACCOUNTING 1.5 UNITS
Class hours: 1.5 Lecture
Recommendation: Students in Accounting or Finance courses are strongly recommended to enroll in a section of ACCT 1T.
This course introduces QuickBooks 6.0, a complete accounting software system for small businesses. (Formerly BUSA 60)

ACCT 61
TURBO TAX ACCOUNTING 1.5 UNITS
Class hours: 1.5 Lecture
Recommendation: Students in Accounting or Finance courses are strongly recommended to enroll in a section of ACCT 1T.
This course introduces personal income tax preparation using Turbo Tax. Preparation with 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 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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ACCT 100 or ACCT 101 or equivalent with a grade of Pass or "C" or higher.
Recommendation: Students in Accounting or Finance courses are strongly recommended to enroll in a section of ACCT 1T.
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 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ACCT 100 or equivalent with a grade of Pass or "C" or higher.
Recommendation: Students in Accounting or Finance courses are strongly recommended to enroll in a section of ACCT 1T.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course is designed to teach students the application of accounting functions using the IBM compatible microcomputer and spreadsheet software. The accounting functions will include the development of financial statements, worksheets, special journals, payroll, bank reconciliations, and personal budgeting. (Formerly USA 133)  
Transfer Credit: CSU

**ACCT 172**  
**ACCOUNTING**  
**WORK EXPERIENCE**  
*2.0 UNITS*  
Class hours: 1.0 Work Experience  
Corequisite: Two units of Accounting 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. 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. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU (Formerly USA 173)

**ACCT 174**  
**ACCOUNTING**  
**WORK EXPERIENCE**  
*4.0 UNITS*  
Class hours: 1.0 Work Experience  
Corequisite: Four units of Accounting 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 until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU (Formerly USA 174)

**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.  
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 231)
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 245
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 course is 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 251
ADVANCED INCOME TAX ACCOUNTING 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ACCT 250 or equivalent with a grade of 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 class 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). 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 (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 Sciences Division)

AJ 71FIRST 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.

Transfer Credit: CSU

AJ 91REPORT 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.

Transfer Credit: CSU

AJ 101INTRODUCTION 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 102CONCEPTS 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 103CRIMINAL 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 104CRIMINAL 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 105COMMUNITY 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 107INTRODUCTION 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 110PATROL 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

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

AJ 150
INTRODUCTION TO CORRECTIONS 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 probation. 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: 1.0 Work Experience
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 an expansion of their regular responsibilities. Student who are not employed but wish to gain work experience may be placed in a non-paying position if such opportunities are available. This course may be taken a maximum of 4 times. Transfer Credit: CSU

AJ 180 (Not Degree Applicable)
INTRODUCTION TO PRIVATE AND BUSINESS SECURITY 2.0 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.

AJ 201
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 208
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 209
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 relating to crime, pre-employment screening, sexual harassment, unlawful employment discrimination, accidents, unexplained losses, and other business activities. Proper documentation of a security investigation is also discussed. Transfer Credit: CSU

AJ 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 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

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This course is an introduction to the fields of narcotics and vice control. 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). 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

ANATOMY AND PHYSIOLOGY

(Science, Engineering, Math Division)

A&P 120

INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY 4.0 UNITS
Class hours: 4.0 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

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Announcement of Courses

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 other 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 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 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. This course will meet the requirements of four year nursing, dental hygiene, physical therapy, paramedical, physical education, and related majors.
Transfer Credit: CSU; UC

A&P 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). 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

ANTHROPOLOGY
(Humanities, Social Sciences Division)

ANTH 100
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 structures and process of culture. The basic concepts of culture are presented including subsistence patterns, organizing devices, patterns for transmission of culture, economics, political organizations, social control, and culture change. The methods of anthropological research and major theoretical orientations are also described. (This course is not open to students who are currently enrolled in or who have received credit for Anthropology 100.)
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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 (CAN ANTH 2)
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 with a grade of Pass or "C" or higher 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 coordinated 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 historic spectrum, from prehistory to contemporary times. Emphasis will be on the culture change after contact with Europeans, and the impact of the Western expansion.
Transfer Credit: CSU; UC

ANTH 201
NATIVE PEOPLES OF CALIFORNIA 3.0 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 culture of Northern, Middle and South America, including their prehistory and social, political, and religious beliefs. The impact of European contact and resultant adaptations, as well as current life situations of tribal 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 not open to students who are enrolled in WS 205 or 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 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). 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 (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 44 (Not Degree Applicable)  
ARCHITECTURAL DRAWING OCCUPATIONAL WORK EXPERIENCE  4.0 UNITS  
Class hours: 1.0 Work Experience  
One (1) hour control class each week plus 15 hours of employment per week for Architectural Drawing work experience 73 or 20 hours of employment per week for Architectural Drawing work experience 74. The employment must be in a job related to the student’s educational goal. Work experience/career internship provides the opportunity for Architectural Drawing students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to the major and job skills must be completed on the job/training site. This course may be taken a maximum of 4 times.

ARCH 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). 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...
Announcement of Courses

firms, legal requirements, and a review of contemporary issues facing the profession. Transfer Credit: CSU; UC*

“UC credit limits may apply: Any or all of the following architecture courses - ARCH 110, 112, 122, 212 - combined with ART 120 and ART 121: maximum credit, 18 units.”

ARCH 111
 ARCHITECTURAL DRAFTING AND DESIGN I 3.0 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*

ARCH 121
 ARCHITECTURAL DRAFTING AND DESIGN II 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 a continuation of the study of methods utilized in the preparation of architectural working drawings. This course includes advanced drawing conventions, design considerations, construction specifications, and structural requirements. Analysis of the materials and construction details of commercial and industrial buildings is given. Emphasis on the purpose and presentation of working drawings and their relationship to building codes is provided.
Transfer Credit: CSU

ARCH 122
 ARCHITECTURAL DELINEATION 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course is a study of, and laboratory experience in, three-dimensional representations including renderings, perspective drawings, paraline drawings and presentation drawings of architectural projects. Emphasis is on the techniques of various drawing media which will enable the students to express their architectural ideas.
Transfer Credit: CSU; UC*

ARCH 123
 INTRODUCTION TO 2-D 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
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*

ARCH 213
 INTRODUCTION TO 3-D COMPUTER AIDED DRAFTING 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Hands-on exercises will be used to reinforce and creating professional quality renderings. 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 AutoCAD Architecture. 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 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**

**REVIT ARCHITECTURE** 4.0 UNITS

Class hours: 3.0 Lecture/3.0 Laboratory

This course provides an introduction to the production of parametric three-dimensional building design models and working drawings using Revit Architecture 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 Architecture. 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 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). 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 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 (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**

**ART AND DESIGN**

(Fine Arts/Communications Division)

**ART 50**

**CHINESE BRUSH PAINTING** 3.0 UNITS

Class hours: 2.0 Lecture/4.0 Laboratory

This course provides the basic introduction to oriental brush, ink and colors. The student learns concepts in design and composition, as well as the philosophy that is the basis of Chinese brush painting. Subjects include traditional floral and animal studies, and abstract expressions. Techniques for mounting of art work are also studied. This course may be taken a maximum of 2 times.

**ART 100**

**INTRODUCTION TO WORLD 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 an overview of world art from prehistoric times to the present. It is an introduction to the ideas that prompt art making and the search for "beauty" and "truth" (aesthetics) in various cultural contexts. It includes an analysis of the language of the visual arts using examples from throughout the world. It also includes an investigation of the artistic techniques and materials used in painting, printmaking, photography, film, ceramics, sculpture and architecture.

**Transfer Credit: CSU; UC**

**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 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.
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 AMERICA AND THE CARIBBEAN:
PREF-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; UC

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; UC

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

ART 107
ASIAN 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.
Asian art history surveys the arts of India, Thailand, Cambodia, Vietnam, Java, China, Korea and Japan. Architecture, painting, sculpture, printmaking and other arts are examined within their philosophical, religious, intellectual and social contexts.
Transfer Credit: CSU; UC

ART 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.
This course surveys the depiction and development of images of Blacks and the stereotypes created in Western culture. The various means artists have used to counter those stereotypes by using techniques of resistance and counter narratives will be examined. Students will study fine art, comic books, comic strips, cartoons, advertising, literature, music, dance, theatre, cinema, broadcasting and television. Writing a research paper is a significant component of the course. Reading of literature theory and criticism is required. This course is not open to students who are enrolled in or who have received credit in HUM 108.
Transfer Credit: CSU; UC

ART 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.
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 HUM 109.
Transfer Credit: CSU; UC

ART 110
FREEHAND DRAWING 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This is a beginning course in the history and appreciation, theory, and practice of representational and non-objective drawing technique, linear perspective, composition, and presentation. Lectures will include the historical development and appreciation of drawing from Western and non-Western cultures.
Transfer Credit: CSU; UC
ART 111
INTERMEDIATE
FREEHAND DRAWING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 110 or equivalent with a grade of Pass or "C" or higher.
This course is a continuation of the hands-on studio experience of ART 110. The course will explore abstraction, cubism and conceptual ideas based on music, poetry and film that have affected art and culture. It will also synthesize the traditional concepts of drawing with the contemporary approaches to drawing since the 20th century. Students will analyze cultural influences, themes and movements in art history from the Renaissance to our current avant-garde and relate them to the creative process of drawing. The course is designed to help identify and enhance each student's individual sensibilities.
Transfer Credit: CSU; UC

ART 112  (CAN ART 24)
LIFE DRAWING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 110 or equivalent with a grade of Pass or "C" or higher.
This course teaches how to draw the live model. Students learn the language and the elements of drawing, anatomy, and the perspective of the human form in space. Demonstrations are given on a variety of approaches to drawing the figure. Students develop technique with an appreciation for the inherent beauty of the material they are working with charcoal, conte, colored pastel and watercolor.
Transfer Credit: CSU; UC

ART 113
ART, SCIENCE, & TECHNOLOGY IN CULTURE AND SOCIETY  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 intersections between art, science, and technology, as well as their broader impact on, and interaction with, visual and material culture. Areas of focus will include the social impact of scientific innovations, technology-driven art, and art/science collaborative projects, including discussions of code-based and algorithmic art, data visualization, robotic and interactive art, machine aesthetics, body modification and cyborg experiments, ecological and environmental art, conceptual Internet projects, culture jamming and hacktivist art, game art and virtual reality, surveillance art, and tele-presence and locative media.
Transfer Credit: CSU

ART 114
STORYBOARD AND GRAPHIC NOVEL ILLUSTRATION  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This course looks at visual storytelling techniques through graphic novels, storyboards, and comic books. Students will learn to effectively communicate a story through pen and ink techniques, draw a pre-visualization for a live-action production, or draw a pre-existing short story. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 115L
PRINTMAKING LAB  1.0 UNIT
Class hours: 3.0 Laboratory
Corequisite: Concurrent enrollment in or prior completion of ART "116 or ART 117 with a grade of Pass or "C" or higher.
This is a lab course intended to complement other courses in the Printmaking curriculum. It is designed to give practical experience in working with the techniques of relief printing, intaglio (etching, aquatint, drypoint, softground, viscosity and photoetching), screenprinting and 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.
Transfer Credit: CSU; UC

ART 116
BEGINNING PRINTMAKING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This is an introductory course in the theory and practice of printmaking that will expose the student to the historical development and contemporary practice of printmaking as an original art form. The student will explore the processes of relief printing (linocut and woodcut) intaglio printmaking (etching, drypoint, and softground), and screenprinting and their contemporary interaction with photo-etching and digital imagemaking through application and appreciation. Recommended for drawing and painting majors, graphic design majors, and photography majors.
Transfer Credit: CSU; UC

ART 117
INTERMEDIATE PRINTMAKING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 116 or equivalent with a grade of Pass or "C" or higher.
This is a course designed to further the student's investigation into the aesthetics and techniques of screenprinting, intaglio (aquatint etching softground, whiteground, sugarlift,) multiple color relief printmaking, and collagraphy. Related photographic and digital image-making techniques will be studied and applied further, such as photo-screenprinting, photo-etching, halftoning, posterization technique, and use of the enlarger, digital camera, flatbed scanner, and slide scanner. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 120
TWO-DIMENSIONAL DESIGN  3.0 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 of 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.

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ART 130A  (CAN ART 10)  
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 still life painting problems provide the student opportunity to discover his or her strengths and artistic persuasion. Lecture and critiques open the student to a deeper sensibility as well as an increased theoretical understanding of painting.  
Transfer Credit: CSU; UC

ART 133A  
WATERCOLOR PAINTING  3.0 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 related 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 134  
WATERCOLOR LANDSCAPE PAINTING I  2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
This course emphasizes the traditional use of materials and techniques related to watercolor painting. The course will analyze color theory, various paint applications, light logic and perspective as they relate specifically to watercolor and nature, with landscape as a major focus of subject matter.  
Transfer Credit: CSU; UC

ART 135  
WATERCOLOR LANDSCAPE PAINTING II  2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
Recommendation: ART 134 or equivalent with a grade of Pass or "C" or higher.  
This course emphasizes new methods and technical approaches to watercolor painting. The course will analyze color theory, various paint applications, light logic and perspective as they relate specifically to watercolor and nature with landscape as a major focus of subject matter. Beginning with the traditional use of materials and techniques related to watercolor painting, the course is designed to further develop the students' understanding of techniques and personal investigation of watercolor and the landscape.  
Transfer Credit: CSU; UC

ART 136  
PAINTING FOR ART MAJORS  3.0 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 the art majors. Topics include use and manipulation of painting materials and color; depicting mood and sensation; expression of form, edge, and negative space; and devices in composition. Projects include creative thinking as applied to non-objective painting, formal invention, and symbolic imagery. Knowledge of art history is expanded through gallery and museum visits and assigned reading. This course may be taken a maximum of 2 times.  
Transfer Credit: CSU; UC

ART 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 jewelry design projects. This course may be taken 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 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 of the art of 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.  
This 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 a maximum of 2 times.  
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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.
This 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 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.
This course builds on techniques learned in ART 151. Emphasis is on the use of the potter's wheel. Glaze technology is introduced. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 154
CERAMICS-INTERMEDIATE
HANDBUILDING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 152 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 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.
This course is designed as an introduction to the ideas, techniques, and tradition of the art of ceramic sculpture. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 156L
CERAMICS LAB  1.0 UNIT
Class hours: 3.8 Laboratory (Open entry/open exit)
Corequisite: One or more of the following courses: ART 150, ART 151, ART 152, ART 155, ART 252, ART 253 or ART 255.
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 a maximum of 4 times.
Transfer Credit: CSU; UC

ART 162
INTRODUCTION TO SCULPTURE  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Recommendation: ART 121 or equivalent with a grade of Pass or "C" or higher.
This course is designed as an introduction to the ideas, techniques, and materials involved in the making of sculptural forms.
Transfer Credit: CSU; UC

ART 163
THE TECHNIQUES OF SCULPTURE  3.0 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 a maximum of 2 times.
Transfer Credit: CSU; UC

ART 171
OCCUPATIONAL WORK EXPERIENCE IN ART  1.0 UNIT
Class hours: 1.0 Work Experience
One unit of Occupational Work Experience in Art 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

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 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 a maximum of 2 times.
Transfer Credit: CSU

Announcement of Courses
Lettering and Typography 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.
In this course students learn the principles and practices of illustration through the examination of artists and illustrators as well as the understanding of materials, techniques, and practical assignments faced by the illustrator. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

Lettering and Typography II 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.
The design and application of letterforms requiring increased technical skills and intensive experience in the use of current 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

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 a maximum of 2 times.
Transfer Credit: CSU

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 a maximum of 2 times.
Transfer Credit: CSU

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 a maximum of 2 times.
Transfer Credit: CSU

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

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

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

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 a maximum of 2 times.
Transfer Credit: CSU

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 hand-on software tutorials. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

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 a maximum of 2 times.
Transfer Credit: CSU

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 a maximum of 2 times.

Transfer Credit: CSU

ART 191B
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 a maximum of 2 times.

Transfer Credit: CSU

ART 192
DIGITAL PAINTING 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 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 PHOTOGRAPHY 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 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 class 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
This course is a bridge connecting conventional drawing and painting 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 a maximum of 2 times.

Transfer Credit: CSU

ART 197
3D COMPUTER ANIMATION 3.0 UNITS
This course may be taken 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 a maximum of 2 times.

Transfer Credit: CSU; UC

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 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 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 emphasizes advanced practice, technique, and historical knowledge of screenprinting as a fine art medium. An important feature of the course will be the study of the materials, stencils, films, blockouts, photomechanical processes, and inks of the screenprinting process. Photographic and digital image-making techniques related to photoscreenprinting will be studied and applied further, including use of the enlarger, stat camera, digital camera, flatbed scanner, and slide scanner. Instruction will cover serigraphic flatbed printing as well as use of the rotary press for textile printing. Students will be required to complete particular aesthetic and technical assignments through their prints. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

ART 219

ADVANCED ETCHING 3.0 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 etching, viscosity printing, collagraphy, and embossing. Related digital imaging and photographic techniques will be presented for integration into the etching process. Students will be required to deal with particular aesthetic issues and techniques. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

ART 231

INTERMEDIATE PAINTING 3.0 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 focuses on the live model as subject matter. The history and philosophy of the figure in art are discussed. Symbolic, expressionistic, allegorical, fantastic, narrative, and abstract styles are surveyed. Drawing and painting techniques and materials are explained. Individual and group critiques are utilized. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

ART 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 or "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 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 to take this course. This is a painting and lecture course which focuses on the live model as subject matter. The history and philosophy of the figure in art are discussed. Symbolic, expressionistic, allegorical, fantastic, narrative, and abstract styles are surveyed. Drawing and painting techniques and materials are explained. Individual and group critiques are utilized. This course may be taken a maximum of 2 times.

Transfer Credit: CSU; UC

ART 238

SPECIAL STUDIES IN PAINTING 3.0 UNITS

Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 136 or ART 237 or ART 130B 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 a maximum of 2 times.

Transfer Credit: CSU; UC TBD after admission.
ART 239
POORAIT 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 a maximum of 2 times.
Transfer Credit: CSU; UC

ART 246
JEWELRY DESIGN  3.0 UNITS
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 audiovisual lectures and museum and gallery visits. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 248
HOLLOW FORMING  3.0 UNITS
JEWELRY PROCESSES  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 246 or equivalent with a grade of Pass or "C" or higher.
This is the fourth and most advanced course in a sequential program covering the design and technical processes of jewelry and metalsmithing. The techniques and projects covered in this course include designing a suite/set of wearable objects and a set of flatware. Specialized advanced techniques and processes will be taught to match the student's specific artistic objectives and projects. The study of the history and culture of jewelry and metalsmithing is continued through audiovisual lectures and museum, gallery, commercial and industrial site visits. This course may be taken 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 continues the exploration and development of forms and techniques encountered in ART 151 and ART 152. The student is expected to determine some of the projects for the semester's work. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 253
CERAMICS-FORM AND CONTENT  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: ART 252 or equivalent with a grade of Pass or "C" or higher.
This course is designed for individualized study by the ceramist with at least three semesters of prior experience at the college level. Students will be expected to write a proposal for work to be accomplished during the semester. Clay technology and kiln firing technique will be introduced. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

ART 255
INTERMEDIATE CERAMIC SCULPTURE  3.0 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 a maximum of 2 times.
Transfer Credit: CSU; UC

ART 264
SCULPTURE-STONECARVING  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Recommendation: 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 stonecarving techniques. This course may be taken 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 progress toward the development of professional skills and techniques in the application of lettering, calligraphy and typography to creative and expressive concepts. Historical and contemporary methods, materials and usage will be explored through a variety of projects. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ART 287B
ROMAN CALLIGRAPHY  2.0 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...
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). 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

**ART 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). 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

**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 (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, Math 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). This course may be taken a maximum of 2 times.

Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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

ASTR 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 (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
(Technology Division)

AB 51
NON-STRUCTURAL REPAIR 4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
This course is an introduction to the collision repair trade. Emphasis is on safe removal and replacement of external panels, bumpers, lights, and trim. Discussion and demonstration of automotive welding will be introduced. Repair of minor body panel dents, finish preparation concepts, and the safe use of power and hand tools will be covered. This course may include I-CAR Live curriculum.

Prerequisite: AB 51 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.

AB 52
STRUCTURAL DAMAGE REPAIR 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 concurrent enrollment.
Recommendation: AB 57 or equivalent with a grade of Pass or "C" or higher.

This course introduces students to structural repair of collision-damage vehicles. Major emphasis is placed on analysis, measuring, and repair of structural damage and welding of full-frame, space frame, and unitized vehicles. Various methods of measuring and repairing structural damage will be utilized including universal, electronic, and dedicated bench systems. This course may include I-CAR Live curriculum.

In this course, students will select and repair replacement of advanced-design automotive panels. Topics include the repair, replacement, and joining of High-Strength Steel (HSS), Ultra Lightweight Steel Auto Body (ULSAB) panels, Ultra High-Strength Steel, Advanced High-Strength Steel, aluminum, composites, plastics, and other innovative materials used in automotive construction. I-CAR Live curriculum may be included in course delivery.

Prerequisite: AB 51 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.

This course specializes in structural automotive welding. Special emphasis will be placed upon Gas Metal Arc Welding (GMAW) and resistance spot welding of structural high strength steel, ultra high-strength steel (UHSS), boron steel, martensitic steel, laminated 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. I-CAR Live curriculum may be presented during course delivery. This course may be taken a maximum of 2 times.

Prerequisite: AB 56 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.

This course emphasizes repair and replacement of structural panels, removal, and replacement of power train and supports, gauging and analysis of major structural damage, and the measurement and alignment of strut towers. I-CAR Live curriculum may be included in course delivery.

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 students presently employed or soon to be employed in the automotive field. Related subjects include welding, safety, testing of weld joints, material design, and 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. I-CAR Live curriculum may be presented during course delivery. This course may be taken a maximum of 2 times.

AB 57
STRUCTURAL AUTOMOTIVE WELDING 2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
Recommendation: AB 56 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.

This course specializes in structural automotive welding. Special emphasis will be placed upon Gas Metal Arc Welding (GMAW) and resistance spot welding of structural high strength steel, ultra high-strength steel (UHSS), boron steel, martensitic steel, laminated 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. I-CAR Live learning modules may be included in course delivery. This course may be taken a maximum of 2 times.

AB 58L
COLLISION REPAIR LAB 1.5 UNITS
Class hours: 5.0 Laboratory
Prerequisite: AB 51 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.

This course allows students to perfect and hone skills obtained in prerequisite courses. In this course, students will select and repair
Announcement of Courses

AB 59F
FULL FRAME REPAIR ANALYSIS  2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
Prerequisite: AB 59M or AB 59P or equivalent with a grade of Pass or "C" or higher, or concurrent enrollment.
The course is designed for shop and damage estimating personnel who want to learn full-frame damage and structural repair analysis. Included topics are full-frame vehicle design analysis, effects of collisions on various full-frame designs, full-frame damage assessment using universal and electronic measuring gauges, full-frame vehicle hook-up and repair options, and methods of determining repair completion with universal and electronic measuring devices. Chief Automotive Systems, Inc. methodology is used in course delivery.

AB 59M
COMPUTERIZED
MEASURING TRAINING  2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
Recommendation: AB 51 or equivalent with a grade of Pass or "C" or higher.
This course develops the skills in the operation and use of computer measuring systems to measure structural automotive damage. 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 electronic measuring systems. Topics include basic collision theory, damage analysis fundamentals, maintenance, and operation of electronic measuring systems. The processes and methods used within each measuring system will be discussed extensively. (Formerly AB 59A)

AB 59P
STRUCTURAL
REPAIR PLANNING  2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
Recommendation: AB 51 or AB 59M or equivalent with a grade of Pass or "C" or higher or appropriate work experience. Current or previous employment in a collision repair facility.

This entry-level course introduces students to the concepts of damage analysis and repair planning for structurally damaged vehicles. It is designed for collision repair technicians and students with little or no 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 and full-frame vehicles.

AB 59U
UNITIZED STRUCTURAL
REPAIR ANALYSIS  2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
Prerequisite: AB 59M or AB 59P or equivalent with a grade of Pass or "C" or higher, or concurrent enrollment.
This course is designed for damage estimating personnel who want to learn about analysis and repair of unitized structural damage using universal gauge and electronic measuring systems. Topics include unitized structural design analysis and effects of vehicle collisions, additional unitized vehicle hook-up and repair options, and precise methods of determining that the repaired vehicle is within factory design specifications using electronic and universal gauges.

AB 61
PREPARATION AND
SPOT REFINISHING  3.0 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Corequisite: AB 61L or equivalent with a grade of Pass or "C" or higher.
Recommendation: AB 51 or equivalent with a grade of Pass or "C" or higher.
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. 1-CAR training modules may be included in course delivery.

AB 61L
AUTOMOTIVE REFINISHING LAB  1.5 UNITS
Class hours: 5.0 Laboratory
Prerequisite: AB 61 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.
This course allows students to develop and improve hands-on skills in preparation and spot refinishing by completing automotive refinishing projects. Students will identify and select specific automotive painting projects relevant to the subject matter. This course may be taken a maximum of 4 times.

AB 62
OVERALL AND
MULTI-COAT REFINISHING  4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Prerequisite: AB 61 or equivalent with a grade of Pass or "C" or higher or concurrent enrollment.
This course develops the skills in 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. 1-CAR live curriculum may 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
Prerequisite: AB 61 or equivalent with a grade of Pass or "C" or higher, or concurrent enrollment, or concurrent enrollment.
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, colors, and types. This course provides students with hands-on techniques for increasing the volume of vehicles processed in the professional automotive refinishing environment. 1-CAR Live curriculum may be presented during this course of study. This course may be taken a maximum of 2 times.

AB 64
AUTOMOTIVE AIR BRUSH PAINTING  2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: AB 61 or equivalent with a grade of Pass or "C" or higher, or related work experience.
This course introduces students to the art of air brush painting and related effects in automotive applications. Students work with various colors and techniques to create special effects on commercial and passenger vehicles.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
vehicles using air brushes. Included are 3-D effects, mural painting, accenting other types of graphic art, and portrait painting on automotive surfaces.

**AB 65**
**MIX AND ADJUSTING COLOR**  2.0 UNITS
Class hours: 1.5 Lecture/2.5 Laboratory
Recommendation: AB 61 or equivalent with a grade of Pass or "C" or higher. 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, spray-out panels, let-down panels for multi-coat matches, troubleshooting of materials, and paint chemistry. 1-CAR curriculum may be presented during course delivery. 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
Recommendation: AB 61 or equivalent with a grade of Pass or "C" or higher or appropriate work experience, or concurrent enrollment. This course trains students in the arts of automotive lettering, graphics 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, and hand pin-striping, and lettering. 1-CAR curriculum may be included in course delivery. This course may be taken a maximum of 2 times.

**AB 67**
**AUTOMOTIVE CUSTOM PAINTING**  2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: AB 61 or AB 62, or equivalent with a grade of Pass or "C" or higher or concurrent enrollment. This is a custom automotive painting course that focuses on building hands-on skills in creating special paint effects, including flames, scallops, checkerboards, shredding, murals, holographic effects, multi-coats, and pearl finishes on automobiles. It includes theory and lab. This course may be taken a maximum of 2 times.

**AB 68L**
**REFINISHING LAB**  1.5 UNITS
Class hours: 5.0 Laboratory
Prerequisite: AB 61 or equivalent with a grade of Pass or "C" or higher or appropriate work experience, or concurrent enrollment. This course increases student skills in automotive refinishing. Students hone their skills and improve their speed by completing automotive refinishing projects. 1-CAR curriculum may be included in course delivery. This course may be taken a maximum of 4 times. (Formerly AB 68)

**AB 73**
**AUTOMOTIVE COLLISION REPAIR OCCUPATIONAL WORK EXPERIENCE**  3.0 UNITS
Class hours: 1.0 Work Experience
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. 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. This course may be taken a maximum of 4 times.

**AB 75**
**BODY PANEL CUSTOMIZING**  4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Prerequisite: AB 51 and AB 56 or equivalent with grades of Pass or "C" or higher, or appropriate work experience.

This is an entry level course that focuses on the modification of automotive body panels. Additional topics include customization of existing body panels, partial-panel fabrication, metal finishing, rust-out panel replacement, welding techniques and the application and use of the sheet metal brake, shear, shrinker/stretcher, and bead roller.

**AB 74**
**AUTOMOTIVE COLLISION REPAIR OCCUPATIONAL WORK EXPERIENCE**  4.0 UNITS
Class hours: 1.0 Work Experience
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. 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. This course may be taken a maximum of 4 times.

**AB 76**
**PARTIAL-PANEL FABRICATION**  4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Prerequisite: AB 75 or equivalent with grades 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.

**AB 77**
**FULL-PANEL FABRICATION**  4.5 UNITS
Class hours: 3.0 Lecture/5.0 Laboratory
Prerequisite: AB 51 or AB 75 and AB 56 or equivalent with grades of Pass or "C" or higher, or appropriate work experience.

This course focuses on full-panel sheet metal design and fabrication. Sheet metal panel fabrication will be demonstrated using pre-determined shapes and forms. Formation of compound angles and complex shapes encompassing an entire panel will be addressed, including the assembly of separate...
complex pieces into one panel. Included are the continued application and use of advanced sheet metal fabrication tools and equipment.

**AB 79L AUTOMOTIVE FABRICATION LAB 1.5 UNITS**

Class hours: 5.0 Laboratory
Prerequisite: AB 75 or AB 76 or AB 77 or equivalent with a grade of Pass or "C" or higher or appropriate work experience, or concurrent enrollment.

This course allows students to hone hands-on skills while completing automotive body panel fabrication projects. Students will identify and select specific projects focusing on needed improvement. This course may be taken a maximum of 4 times (Formerly AB 79)

**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, time scheduling, business ethics, and the completion of paperwork related to autobody customer service positions. I-CAR training may be included in course delivery. This course may be taken a maximum of 2 times.

**AB 83A COMPUTERIZED DAMAGE ESTIMATING - AUDATEX 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 Audatex collision damage estimating software. Students will learn to properly identify vehicles, components, and systems and how 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 Audatex software program will be reviewed extensively. This course may be taken a maximum of 2 times.

**AB 83P COMPUTERIZED DAMAGE ESTIMATING - PATHWAYS 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 Pathways collision damage estimating software. Students will use the application to properly identify vehicles, components, and systems, and how 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 Pathways software program will be reviewed extensively. This course may be taken a maximum of 2 times. (Formerly AB 83C)

**AB 83U COMPUTERIZED DAMAGE ESTIMATING-ULTRAMATE 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 Ultramate damage estimating software. Students will learn to properly identify vehicles, components and systems, and to select and input the appropriate replacement parts and labor costs into an Ultramate 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 Ultramate software program will be reviewed extensively. This course may be taken a maximum of 2 times. (Formerly AB 83M)

**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 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. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours). This course may be taken a maximum of 2 times.

**AB 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. Credit is based upon the number of hours in the semester expected to complete the project (1 unit for 54 hours). This course may be taken a maximum of 2 times.
expected to complete the project (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: 2.5 Lecture/1.5 Laboratory
Recommendation: Proficient in MS Windows Software application.
This is an entry-level course for students wanting to learn to estimate non-structural (minor) automotive damage. Emphasis is on vehicle construction and structural design, repair methodology, vehicle component and systems identification, and in developing appropriate judgment repair times. Students learn to write hand-written estimates identifying the cost of parts, labor, materials, sublet, and other charges required to return damaged vehicles to factory specifications. 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. I-CAR Live training may be included in course delivery. 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 concurrent enrollment, or appropriate work experience. Recommendation: Proficient in MS Windows Software application.
This course expands students’ ability to estimate complex types of structural, mechanical, and electrical damage to vehicles. Areas of study include understanding collision theory, damage analysis fundamentals, visual inspection process, measuring and analyzing structural damage, suspension and mechanical systems damage, factory build tolerances, and safety systems of the severely damaged vehicles. Other topics include estimator job functions, customer satisfaction, regulatory compliance, and ethics within the collision repair industry. I-CAR Live curriculum may be presented during this course. Transfer Credit: CSU

**AB 183**
**COMPUTERIZED DAMAGE ESTIMATING** 1.5 UNITS
Class hours: 1.5 Lecture/0.5 Laboratory
Recommendation: Work experience in the automotive collision repair industry.
The focus of this course is for students to distinguish between collision damage estimating programs. Students learn how each software program is used to properly identify vehicles, components, and systems, and how to select and input the appropriate replacement parts and labor costs into computerized damage reports. Topics include comparison of customer and insurance company profiles, 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 each software program will be reviewed. I-CAR Live curriculum may be included in course delivery. 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 59M or AB 181 or AB 182 or equivalent with a grade of Pass or “C” or higher, or appropriate work experience.
This course is designed to assist the collision damage estimator, appraiser and student to better understand the process of analyzing steering and suspension damage to 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 282**
**STEERING, SUSPENSION AND POWERTRAIN ANALYSIS FOR ESTIMATORS** 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: AB 59M or AB 181 or AB 281 or equivalent with a grade of Pass or “C” or higher, or concurrent enrollment, 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 59M or AB 181 or AB 281 or equivalent with a grade of Pass or “C” or higher, or concurrent enrollment, or appropriate work experience.
Recommendation: AB 181 or equivalent with a grade of Pass or “C” or higher.
This course builds on student knowledge gained from the previous courses and assists in mastery of collision damage analysis of full-frame vehicles. The focus of this course is specific damage analysis of pickup trucks and sport utility vehicles (SUVs). Transfer Credit: CSU

**AB 285**
**COLLISION REPAIR MANAGEMENT** 3.0 UNITS
Class hours: 2.5 Lecture/1.5 Laboratory
Prerequisite: 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 promotion and management of an automotive repair facility. Areas of training
include development of standard operating procedures (SOPs), 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, regulatory compliance, effective communication skills, process improvement, and time management.

Transfer Credit: CSU

**AB 286**

**COMPUTERIZED SHOP MANAGEMENT**  3.0 UNITS

Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: AB 182 or AB 285 or equivalent with a grade of Pass or "C" or higher, or concurrent enrollment, or equivalent work experience.

This is a theory and practical course centering on computerized collision repair shop management. A comparison of various management software applications, features, and functions, as well as available training tutorials are included in the course delivery. Additional content includes interface with estimating and accounting applications, embedding regulatory compliance, parts ordering and tracking, labor dispatching and tracking, payroll processing, administrative and accounting reports, individual work order reports tracking production cycle-time, customer service call-backs, and forecasting.

Transfer Credit: CSU

**AB 287**

**ADVANCED COLLISION REPAIR MANAGEMENT**  2.0 UNITS

Class hours: 2.0 Lecture
This course includes presentation of the skills required to effectively direct, manage, and promote multi-shop organizations (MSOs). Areas of advanced training include rules and regulations, standard operating procedure (SOP), job costing, equipment and materials procurement, facility cost analysis, department operations, safety, employee and right-to-know issues, warranties, customer satisfaction, licensing and certification, insurance direct repair programs (DRPs) from the perspective of multi-shop organizations and/or franchise body shop operations.

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

**AUTOMOTIVE MECHANICAL REPAIR TECHNOLOGY**

(Technology Division)

**AUTO 1**

**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**

**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**

**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**

**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**

**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**

**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 dealing with maintenance of the modern automobile. Emphasis is on the elementary operating principles and beginning skill development. The course is designed to allow students to become
familiar with automotive heating and air conditioning and enter the work environment with basic skills.

**AUTO 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 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: 1.0 Work Experience  
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. 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. This course may be taken a maximum of 4 times.

**AUTO 74** AUTOMOTIVE MECHANICAL REPAIR OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS  
Class hours: 1.0 Work Experience  
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. 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. This course 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 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). 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 (2 units for 108 hours). 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.
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 a theory/practical course in Automotive Engine Repair that includes 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
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 TRANSAXLES 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 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
Recommendation: AUTO 181 and AUTO 73/74 or equivalent with grades of Pass or "C" or higher.
This course is a study of the principles of the automotive power systems-clutch, manual and automatic transmission, transaxle, transfer case, driveline, drive-axle, differential, including diagnosis and service. This course is taught using specified manufacturer’s components and materials.
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.
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 BRAKE AND SUSPENSION 6.0 UNITS
Class hours: 5.0 Lecture/5.0 Laboratory
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 theory and practical course in basic electricity and automotive electrical systems such as battery, starting, charging, and electronic ignition. Test equipment and computer systems will also be covered.
Transfer Credit: CSU

AUTO 161
AUTOMOTIVE ELECTRICITY 7.0 UNITS
Class hours: 6.0 Lecture/4.0 Laboratory
Recommendation: AUTO 100 or AUTO 151 and AUTO 73/74 or equivalent with grades of Pass or "C" or higher.
This is a theory/practical course in basic electricity and automotive electrical systems, such as battery, starting, charging, and electronic ignition systems. The content will be presented on a single manufacturer’s product line.
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
Announcement of Courses

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
Recommendation: AUTO 100 and AUTO 73/74 or equivalent with grades 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, effective 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 will be included. This course may be taken a maximum of 2 times.
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

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AUTO 212
AUTOMOTIVE SPECIALTY  2.0 UNITS
Class hours: 6.0 Laboratory
Prerequisite: AUTO 210 or equivalent with a grade 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.
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

AUTO 281
EMISSION CONTROL SYSTEMS - 1997 STANDARDS  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 course gives the advanced automotive student exposure to the current methods, devices, and manufacturers of automotive emission control systems. It provides the student with an opportunity to obtain an advanced emission specialist technician license. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

BIOLOGY
(Science, Engineering, Math Division)

BIO 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 a maximum of 2 times.
Transfer Credit: CSU

BIO 105
MAN AND ENVIRONMENT  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 is designed to help both science and non-science 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

BIO 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.
The common plants and animals of California are studied with emphasis upon those local forms which can be readily collected or observed. The lecture is designed to familiarize the student with the life history and identification of local species of plants and animals and to aid in the understanding of the relationship of these organisms to their environment. The laboratory and field work emphasize ecological principles and taxonomic identification.
Transfer Credit: CSU; UC*
*UC credit limits may apply. No credit for BIOL 110 if taken after BOT 120.

BIO 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

BIO 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 200.

BIO 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 a maximum of 2 times.
Transfer Credit: CSU

BIO 200
PRINCIPLES OF BIOLOGY  5.0 UNITS
Class hours: 3.0 Lecture/6.0 Laboratory
Prerequisite: BIOL 115 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.
BIOL 201   (CAN BIOL SEQ A)  
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. 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.  
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 a maximum of 4 times.  
Transfer Credit: CSU; UC TBD after admission.

BIOL 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). 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 (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 (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

BOTANY  
(Science, Engineering, Math 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

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BUSINESS ADMINISTRATION  (Business Education Division)

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.

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.

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.

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.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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 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). This course may be taken a maximum of 2 times.

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.  
Transfer Credit: CSU; UC

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.  
Transfer Credit: CSU

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.  
Transfer Credit: CSU

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 in depth study will be made of the Labor Management Relations Act as amended, the National Labor Relations Board, and the Landrum-Griffin Act. Special attention is given to grievance procedures and arbitration cases. Negotiations of a collective bargaining agreement will be simulated.  
Transfer Credit: CSU

BA 110  
ADVERTISING  3.0 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
BA 113
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 BA 113 combined: maximum credit, one course.

BA 114
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 115
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 117
INTRODUCTION TO SUPERVISION 3.0 UNITS
Class hours: 3.0 Lecture
This is an introductory course focusing on the leadership skills and responsibilities required of supervisors in industry, business, and government agencies. Topics to be explored will include effective communication practices, training, and evaluation of employees, management systems organization, and delegation of responsibilities. Designed for in-service supervisors and pre-supervisor education, this class offers the demonstration of leadership skills. This course can be taken in either a traditional or an online learning environment.
Transfer Credit: CSU

BA 118
MANAGEMENT-RETAILING 3.0 UNITS
Class hours: 3.0 Lecture
This course is designed to meet the needs of retail store managers and help prepare students for positions in retail store management. Topics covered: organizational structure, merchandise planning and control, sales promotion, pricing, and expense management.
Transfer Credit: CSU

BA 120
MANAGEMENT-ACCOUNTING AND INTERNAL CONTROL 3.0 UNITS
Class hours: 3.0 Lecture
The accounting cycle will be introduced with emphasis on understanding financial records. Instruction will be given on the internal control of the industry being studied, as well as an introduction to the analysis of the financial statements. This course can be taken in either a traditional or an online learning environment.
Transfer Credit: CSU

BA 121
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 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 course covers 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.
Transfer Credit: CSU

BA 152
FUNDAMENTALS OF IMPORTING AND EXPORTING 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 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

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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 changes, and dealing effectively with stress. Emphasis is on the process of developing presentation materials, planning presentations, and using the latest communication technology with which to deliver professional, compelling presentations.

Transfer Credit: CSU

BA 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 have completed JOUR 157.

Transfer Credit: CSU

BA 171
BUSINESS ADMINISTRATION OCCUPATIONAL WORK EXPERIENCE 1.0 UNIT
Class hours: 1.0 Work Experience
Corequisite: One unit 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.

Transfer Credit: CSU

BA 172
BUSINESS ADMINISTRATION OCCUPATIONAL WORK EXPERIENCE 2.0 UNITS
Class hours: 1.0 Work Experience
Corequisite: Two units of Business Administration 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.

Transfer Credit: CSU

BA 173
BUSINESS ADMINISTRATION OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: 1.0 Work Experience
Corequisite: Three units of Business Administration Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.

Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

BA 174
BUSINESS ADMINISTRATION OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS
Class hours: 1.0 Work Experience
Corequisite: 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.
with increased understanding between the student/workers, the college, and the employer/trainers.
First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.
Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 4 times.

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 inter-reaction of the various departments and the work flow are analyzed for the purpose of developing a cooperative attitude among personnel of the various departments.
Transfer Credit: CSU

BA 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).
Transfer Credit: CSU

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 (2 units for 108 hours).
Transfer Credit: CSU

BUSINESS COMMUNICATIONS
(Business Education Division)

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 the course fulfills 54 hours of the English requirement for the Court Reporting Certification.

Bcom 51
BUSINESS ORAL COMMUNICATION 1.5 UNITS
Class hours: 1.5 Lecture
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.
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). 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 (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 151 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 or satisfactory completion of the English Placement Process.
This course is designed to develop those communication skills necessary to present effective written and oral business briefings and reports. It stresses the need to write and speak clearly, cohesively, concisely, and convincingly. Students will structure reports, both orally and written, on topics about which they are knowledgeable.
Transfer Credit: CSU

BCOM 150
INTERNATIONAL BUSINESS COMMUNICATION  3.0 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 designed to correlate with the content coverage of primary business communication texts.
Transfer Credit: CSU

BCOM 152
JOB SEARCH IN THE BUSINESS FIELD  1.5 UNITS
Class hours: 1.5 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 a maximum of 2 times.
Transfer Credit: CSU

BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES
(Business Education Division)

BCOT 3T (Not Degree Applicable)
BUSINESS COMMUNICATIONS, WORD PROCESSING, OR KEYBOARDING TUTORIAL  0.5 UNIT
Class hours: 2.0 Laboratory
Open Entry/Open Exit
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 7T (Not Degree Applicable)
INDIVIDUALIZED COMPUTER LITERACY SKILLS  0.5 UNIT
Class hours: 1.1 Laboratory
Open Entry/Open Exit
This course increases the business students knowledge of computer technology resources on campus, improves student use of computer technology for successful completion of technology-based course assignments, and improves student confidence in utilizing computer technology. Special attention will
be given to skills necessary for success in distance education courses. This course is offered on a credit/no credit basis only.

**BCOT 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 also will be introduced to the microcomputer. This course can be taken in a traditional classroom setting, in an individualized modular setting, or in an online environment.

**BCOT 53**

**ADVANCED DATA ENTRY**  **2.0 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 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.

**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 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 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 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.

**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 introduces the student to Word functions such as formatting with special features; merging documents and sorting and selecting data; working with shared documents; creating tables and indexes; recording, running, and editing macros; creating fill-in forms; and adding visual appeal to documents. This course prepares the student for Microsoft Office User Specialist (MOUS) Word Expert 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 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 word processing 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 ONE NOTE**  
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). 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 (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**
**3.5 UNITS**

Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: Ability to type 30 wpm and concurrent enroll.

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 worksheets, collaborating with workgroups, and importing and exporting data. This course prepares the student for Microsoft Certified 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 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 118**
**MICROSOFT ACCESS**
**FOR OFFICE TECHNOLOGY**
**1.5 UNITS**

Class hours: 1.5 Lecture/1.0 Laboratory
Recommendation: Concurrent enrollment in BCOT 3T.

This course introduces the student to Microsoft Access software applications for administrative assistants and office technology. This course prepares the student for Level 1 Microsoft Certified Application Specialist (MCAS) certification for Microsoft Access. This course may be taken a maximum of 2 times.

*Transfer Credit: CSU*
BCOT 119
BUSINESS VIRTUAL
OFFICE TECHNOLOGIES  3.0 UNITS
Class hours: 3.0 Lecture
This course introduces the student to the world of the virtual office. Topics include the evolution of the virtual office, becoming part of the virtual office, and creating/setting up a virtual office to support a business. Related topics on communication and business operations via technological office components and explored. This course is a requirement of the Business Computerized Office Technologies Department's Virtual Office Assistant Verification of Completion certificate program.
Transfer Credit: CSU

BCOT 120
INTEGRATED BUSINESS
OFFICE PROJECTS  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: BCOT 112, BCOT 113, and BCOT 96 or BCOT 114 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.
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 typewriting, machine transcription, shorthand, office procedures, and court reporting. This course meets 54 hours of the English requirement for Court Reporting Certification.
Transfer Credit: CSU

BCOT 171
BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE  1.0 UNIT
Class hours: 1.0 Work Experience
Corequisite: One unit of Business Computerized Office Technologies 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. 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. 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
BCOT 172
BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE    2.0 UNITS
Class hours: 1.0 Work Experience
Corequisite: Two units of Business Computerized Office Technologies 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. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.

Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

BCOT 174
BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE    4.0 UNITS
Class hours: 1.0 Work Experience
Corequisite: 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. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

BCOT 173
BUSINESS COMPUTERIZED OFFICE TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE    3.0 UNITS
Class hours: 1.0 Work Experience
Corequisite: 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.

Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.

Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

CHEMISTRY

(Science, Engineering, Math 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 the Math Placement Process.

Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 100.

This course is an introduction to the basic principles of inorganic and organic chemistry and biochemistry with their application to problems encountered in everyday lives. The course includes the metric system, atomic structure, bonding, solutions, chemical reactions, hydrocarbons, functional groups, carbohydrates, lipids, and proteins. It is designed to give a general introduction to fundamental concepts and to prepare students for majors in nursing, dental hygiene, physician assistant, physical therapy assistant, liberal arts, and technical fields. (Not open to those with credit in more advanced courses.)

Transfer Credit: CSU; UC*

*UC credit limits may apply: CHEM 100 and CHEM 110 combined: maximum credit, one course. No credit for CHEM 100 or CHEM 110 if taken after CHEM 111.

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 within four years prior to the date of enrollment in CHEM 110.

This introductory inorganic chemistry course emphasizes basic principles, formulas, equations, and chemical math problems. It
is designed for students with little or no previous chemistry and prepares students for CHEM 111, General Chemistry.

**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 111   (CAN CHEM 2) (CAN CHEM SEQ A)  GENERAL CHEMISTRY   5.0 UNITS**

Class hours: 3.0 Lecture/6.0 Laboratory

Prerequisite: CHEM 110 or equivalent with a grade of Pass or "C" or higher and MATH 80 or MATH 80B or equivalent with grades of Pass or "C" or higher (satisfactory completion of the Math Placement Process may be substituted for MATH 80).

Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 111.

This course is designed for science majors. It includes stoichiometry; properties and changes of state for gases, liquids and solids; solutions; colloids; equilibria of gases, weak acids and bases, and slightly soluble compounds.

**Transfer Credit:** CSU; UC

**CHEM 112   (CAN CHEM 4) (CAN CHEM SEQ A)  GENERAL CHEMISTRY   5.0 UNITS**

Class hours: 3.0 Lecture/6.0 Laboratory

Prerequisite: CHEM 110 or equivalent with a grade of Pass or "C" or higher or equivalent.

Recommendation: It is strongly recommended that the preceding prerequisite be completed within four years prior to the date of enrollment in CHEM 112.

This course is designed for science majors and is a continuation of CHEM 111. It includes oxidation-reduction; electrochemistry; modern atomic structure and bonding; molecular geometry; coordination chemistry; nuclear chemistry; thermodynamics; kinetics and organic chemistry. The laboratory includes some qualitative analysis.

**Transfer Credit:** CSU; UC

**CHEM 205   (CAN CHEM 12) QUALITATIVE 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 prerequisite 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 with 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 prerequisites 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.

This course is a continuation of CHEM 211, General Chemistry.

This course may be taken a maximum of 2 times.

**Transfer Credit:** CSU; UC TBD 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). 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

**CHILD DEVELOPMENT**

*(Health Occupations Division)*

**CD 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). This course may be taken a maximum of 2 times.

**CD 110  CHILD DEVELOPMENT   3.0 UNITS**

Class hours: 3.0 Lecture

This course examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through development.
adolescence. There will be an emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences, and analyze characteristics of development at various stages.

Transfer Credit: CSU; UC

**CD 115 PARENT SCHOOL PARTNERSHIPS 3.0 UNITS**

Class hours: 3.0 Lecture

This course is designed to introduce students to various current family, school, and community partnership models and approaches. Students will acquire knowledge and skills toward fostering two-way partnerships with families and communities of diverse backgrounds from primary through high school. Historical, legal, social, and political perspectives regarding educational access and equity for diverse student populations found in contemporary classrooms will be addressed. Teacher candidates will also broaden their knowledge and understanding of ethnically and linguistically diverse families and communities to be more effective in building relationships with them.

Transfer Credit: CSU

**CD 124 TEACHING IN A DIVERSE SOCIETY 3.0 UNITS**

Class hours: 3.0 Lecture

Examination of the development of social identities in diverse societies, including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms, and teaching. Various classroom strategies will be explored, emphasizing culturally and linguistically appropriate antibias approaches supporting all children in becoming competent members of a diverse society. The course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media, and schooling.

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 appropriate use of observation and assessment strategies to document development, growth, play, and learning of young children. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored. The emphasis will be on developing observation skills that will facilitate understanding children's behavior and encouraging positive self-esteem while helping the child work toward self-control. Content will cover effective communication with children and families, theories of behavior, guidance techniques, and appropriate teaching and intervention strategies.

Transfer Credit: CSU

**CD 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). 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 (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

**CHILD DEVELOPMENT/EARLY CHILDHOOD (Health Occupations Division)**

**CDEC 62 EXPLORING 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 EXPERIENCES 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.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
This course focuses on principles and methods of providing creative musical and movement experiences for children. The student will also have the opportunity to learn how to use simple musical instruments suitable for use in Early Childhood Education programs. This course meets the Department of Social Services Classification Indicator DS 3.

CDEC 66
ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD EDUCATION PROGRAMS 3.0 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 an examination of the underlying theoretical principles of developmentally appropriate practices applied to the programs and environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative, and intellectual development for all children. It provides a survey of the field of Early Childhood Education, emphasizing historical roots of a variety of programs, and the evolution of the professional practices promoting ethics, advocacy, and professional identity.
Transfer Credit: CSU

CDEC 112
INTRODUCTION TO CURRICULUM 3.0 UNITS
Class hours: 3.0 Lecture
This course presents an overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age six. Students will examine a teacher's role in supporting development and fostering the joy of learning for all young children, using observation and assessment strategies emphasizing the essential role of play. An overview of content areas will include, but not be limited to: language and literacy, social and emotional learning, sensory learning, art and creativity, and math and science.
Transfer Credit: CSU

CDEC 113
THE CHILD, FAMILY, AND COMMUNITY 3.0 UNITS
Class hours: 3.0 Lecture
This course examines the developing child in a societal context, focusing on the interrelationship of family, school, and community and emphasizes historical and socio-cultural factors. The processes of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families.
Transfer Credit: CSU

CDEC 1133
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.
Transfer Credit: CSU

CDEC 161
HEALTH, SAFETY, AND NUTRITION 3.0 UNITS
Class hours: 3.0 Lecture
This course introduces the laws, regulations, standards, policies, procedures, and early childhood curriculum related to child health, safety, and nutrition. The key components that ensure physical health, mental health, and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. There will be a focus on integrating the concepts into everyday planning and program development for all children.
Transfer Credit: CSU

CDEC 164
PRACTICUM FIELD EXPERIENCE 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: CD 110, CDEC 111, CDEC 112 and CDEC 113 or equivalent with grades of Pass or "C" or higher.
Recommendation: CD 124, CD 139, and CDEC 161.
This course is designed to provide an opportunity for students placed in the Cerritos College Child Development Center and off-site practica to explore the relationship between theory and practice in programs for young children. The course includes both lecture and laboratory experiences during which students will examine developmental issues, the role of the teacher/caregiver in early childhood programs, and the relationship between programs and families. Students will explore and practice techniques for the observation and recording of behavior; examine environments for young children; and plan, implement, and evaluate developmentally appropriate, culturally relevant experiences for young children. Students spend 3 hours/week in placement for a total of 54 hours/semester. TB clearance and good health are required to participate in this course. This course meets the Department of Social Services Classification Indicator DS 3.
Transfer Credit: CSU

CDEC 173
EARLY CHILDHOOD EDUCATION OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: 1.0 Work Experience
One (1) hour control class each week plus 15 hours of employment per week. The employment must be in a job related to the student's educational goal. Occupational
Work Experience is a supervised employment program in an approved work station related to the student’s declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. This course may be taken a maximum of 4 times based on the number of hours on the job. This course meets the Department of Social Services Classification Indicator DS 3.
Transfer Credit: CSU

CDEC 174
EARLY CHILDHOOD
EDUCATION OCCUPATIONAL
WORK EXPERIENCE 4.0 UNITS
Class hours: 1.0 Work Experience
One (1) hour control class each week plus 20 hours of employment per week. The employment must be in a job related to the student’s educational goal. Occupational Work Experience is a supervised employment program in an approved work station related to the student’s declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or are an expansion of their regular responsibilities. This course may be taken a maximum of 4 times based on the number of hours on the job. This course meets the Department of Social Services Classification Indicator DS 3.
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). 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 (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

CIT 298
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 (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

CHILD DEVELOPMENT/FAMILY CHILD CARE
(Health Occupations Division)

CITC 10 (Not Degree Applicable)
FAMILY CHILD CARE PROVIDERS 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/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
Recommendation: 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 DS 4. (formerly CDIT 51)
Transfer Credit: CSU

CDIT 152
INFANT AND TODDLER PROGRAMS 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: CD 110 and CDIT 151 or equivalent with grades of Pass or “C” or higher.
This course explores program models for children from birth to three years of age, addressing program goals, philosophies, curriculum, building relationships with infants, toddlers and families, safety routines,
physical space and equipment, as well as infant and family needs especially in a group setting. This course meets the Department of Social Services Classification Indicator DS 4. (Formerly CDIT 52)
Transfer Credit: CSU

CHILD DEVELOPMENT/INSTRUCTIONAL AIDE

(Health Occupations Division)

CDIA 73
EDUCATIONAL PARAPROFESSIONAL OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: 1.0 Work Experience
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. 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 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 2 times based on the number of hours on the job.

CDIA 74
EDUCATIONAL PARAPROFESSIONAL OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS
Class hours: 1.0 Work Experience
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. 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 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 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 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

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 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 per 54 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

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 (2 units for 108 hours). This course may be taken a maximum of 2 times.
Transfer Credit: CSU

CHILD DEVELOPMENT/SPECIAL EDUCATION
(Health Occupations Division)

CDS 50
SURVEY OF SPECIAL EDUCATION 3.0 UNITS
Class hours: 3.0 Lecture
This course surveys the field of special education emphasizing the role of the Special Education Assistant in the training of the exceptional individuals. It includes an introduction to the types of special need

CDS 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.

CDS 73
SPECIAL EDUCATION ASSISTANT OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: 1.0 Work Experience
One (1) hour control class each week plus 15 hours of employment per week. The employment must be in a job related to the student’s educational goal. 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 for a maximum of 4 times based on the number of hours on the job. This course meets the Department of Social Service Classification Indicator DS3.

CDS 74
SPECIAL EDUCATION ASSISTANT OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS
Class hours: 1.0 Work Experience
One (1) hour control class each week plus 20 hours of employment per week. The employment must be in a job related to the student’s educational goal. 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

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 through lectures, films, and reading assignments. This course is not recommended for native speakers.
Transfer Credit: CSU; UC

COMPUTER AND INFORMATION SCIENCES
(Science, Engineering, Math Division)

CIS 5C (Not Degree Applicable)
BUSINESS COMPUTER INFORMATION SYSTEMS DATABASE 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 database application. This course may be taken a maximum of 2
times. (Not open to students with credit in CIS 102).

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
CIS 50
BASIC COMPUTER LITERACY  0.5 UNIT
Class hours: 2.0 Laboratory
This course provides the student with a basic overview of the components of a computer and application software. This course is for the student who is not familiar with the use of the computer and its applications. Topics will include a basic introduction to computer systems hardware, Windows, Word, Excel, and PowerPoint. The class stresses hands-on use of the computer with its applications.

CIS 52
DATA PROCESSING MATHEMATICS  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: Satisfactory completion of the Math Placement Process or MATH 40 or equivalent with a grade of Pass or "C" or higher.
This course will provide students with an understanding of basic mathematical concepts, as used in computer applications. Students will solve problems in fundamental algebra using linear and nonlinear functions, study inventory statistics and probability and their relationships to each other, and learn to set up and solve formula relationships, including direct and indirect proportions. Other topics will include number systems, logic, mathematics of elementary finance, table structures, Boolean algebra, and basic geometric concepts, including some coordinate geometry.

CIS 54A
EXCEL FOR WINDOWS PART 1  1.5 UNITS
Class hours: 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 the Microsoft Excel for Windows spreadsheet. The fundamentals of building worksheets will include creating worksheets, formatting, functions, formulas, macros, data tables, analysis tools, and the creation of charts. Techniques to deal with multiple worksheets and large worksheets will be covered. The database functions of Excel will include: sorting, filtering, queries, macros, and record retrieval. Hands-on exercises will be used to reinforce the functions of Excel.

CIS 56
MICRO DISK OPERATING SYSTEMS  1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Prerequisite: CIS 101 or CIS 102 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
WINDOWS FOR COMPTIA A+ CERTIFICATE EXAMS  1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Prerequisite: CIS 101 or CIS 102 or equivalent with a grade of Pass or "C" or higher.
The student preparing for this exam should also enroll in CIS 56. This course is designed to help the student prepare for the Windows portion of the DOS/Windows certification test for the CompTIA A+ certification exam. The A+ certification consists of two exams: (1) a basic knowledge of PC hardware; (2) familiarity with installing and maintaining DOS, Windows 3.x, and Windows 95/98.

CIS 58A
PC OPERATING SYSTEM A+ CERTIFICATION  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 101 or CIS 102 or equivalent with a grade of Pass or "C" or higher.
This course is designed to cover the subject matter required for the operating systems technologies component of CompTIA’s A+ Certification. Topics to be discussed include operating system installation, configuration, upgrading, troubleshooting, and networking. This course may be taken for a maximum of 3 times.

CIS 58B
PC CORE HARDWARE A+ CERTIFICATION  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 101 or CIS 102 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This course is designed to cover the subject matter required for the core hardware component of CompTIA’s A+ Certification. Topics to be discussed include computer hardware installation, construction, upgrading, troubleshooting, repair, networking, Internet connectivity and wireless technologies. This course may be taken for a maximum of 3 times.

CIS 70A
NETWORKING FUNDAMENTALS  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 101 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This is a survey course about the computer networking and telecommunications industry. Topics covered include the seven layers of the Open Systems Interconnection Model (OSI), network architectures, internetworking, and telecommunications.

CIS 70B
NETWORK+ CERTIFICATION  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: 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
Prerequisite: CIS 70A 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 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 subnetting, how TCP/IP addresses are discovered and used in computer networks, IP routing and router usage, and troubleshooting a TCP/IP network.

**CIS 70E**
**ROUTER CONFIGURATIONS AND PROTOCOL** 3.5 UNITS
Class hours: 3.0 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 class covers LAN (Local Area Network) Switching, VLANs (Virtual Local Area Networks), LAN design, IGRP (Interior Gateway Routing Protocol), Access lists, and Novell IPX.

**CIS 70G**
**WIDE AREA NETWORKS** 3.5 UNITS
Class hours: 3.0 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
Prerequisite: 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
Prerequisite: 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. 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 subnetting, how TCP/IP addresses are discovered and used in computer networks, IP routing and router usage, and troubleshooting a TCP/IP network.

**CIS 70L**
**NETWORK SECURITY FUNDAMENTALS** 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.
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.
This course provides students with the knowledge and skills required to install, configure, administer, troubleshoot, 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 186 or higher.
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 SERVICES** 1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Recommendation: Strongly recommend CIS 212 or equivalent with a grade of Pass or "C" or higher.
This course covers the support of the various features of Microsoft Internet Information Services (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 Services. The course uses a combination of lectures, demonstrations, discussions, online assignments, and hands-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 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.

**CIS 101**  
**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 organizational 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 will be introduced to basic operational concepts in database programming using Access, in creating and editing text in Word, and be introduced to presentation graphics using PowerPoint.  
*Transfer Credit: CSU; UC*  
*UC credit limits may apply. CIS 101 and 102 combined: maximum credit, one course.*

**CIS 110**  
**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  
Prerequisite: 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 FRONTPAGE  1.5 UNITS**  
Class hours: 1.5 Lecture/0.5 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 designing projects provide a practical application of Web developments 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  
Prerequisite: CIS 120 or equivalent with a grade of Pass or "C" or higher. 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, newsgroups, Listserve, 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. (This course is not open to students who have taken CIS 126.)  
*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 or 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. Programming concepts and terminology will be taught using the JavaScript programming language. (This course is not open to students with credit in CIS 125).
Transfer Credit: CSU

CIS 140
QUERY/400 1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: CIS 141 or equivalent with a grade of Pass or "C" or higher.
This course covers the following: SQL, subqueries, joins, aggregations, groupings, sorting, filtering, queries, conditions, and repetition. This course will use IBM Query/400 and various database management system 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 options check box controls in Excel. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

CIS 141
I SERIES 400 OPERATIONS 3.0 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 introduces the student to the operations of the IBM iSeries 400 computer system using the OS/400 operating system. This course includes the following topics: navigating around the system, command structure, message handling, Operation Navigator, trouble shooting, system security, job scheduling, backup/restore, work management, library management, object management, control management, and control language programming.
Transfer Credit: CSU

CIS 141A
OPERATIONS NAVIGATOR I SERIES (AS/400) 1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Recommendation: CIS 141 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.

This course will introduce the student to operating an iSeries 400 (AS/400) through the graphical interface Operations Navigator (ON). Operations Navigator will be used to configure, monitor, and manage the iSeries 400 (AS/400). Topics include basic operations, printing, job management, device configuration, security, database management, file systems, backup, and user/groups. This course is primarily for Information Technology professionals with some background in the AS/400 operations.
Transfer Credit: CSU

CIS 142A
AS/400 OPERATIONS PART I 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 operations of the IBM AS/400 Computer System using the OS/400 operating system. The course includes the following topics: System security, job scheduling, job management, back/restore, work management, library management, object management, hardware architecture and configuration, software, device management, and control language.
Transfer Credit: CSU

CIS 142B
AS/400 OPERATIONS/ FACILITIES-PART 2 1.5 UNITS
Class hours: 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 142C
AS/400 OPERATIONS/ FACILITIES-PART 3 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 142D
AS/400 OPERATIONS/ FACILITIES-PART 4 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 142E
AS/400 OPERATIONS/ FACILITIES-PART 5 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 155
MICROSOFT ACCESS 3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 151 or equivalent with a grade of Pass or "C" or higher or appropriate work experience.
This course teaches students to create professional Excel applications using the Visual 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 options 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

CIS 155B
MICROSOFT ACCESS LEVEL 2 1.5 UNITS
Class hours: 1.5 Lecture/1.0 Laboratory
Recommendation: CIS 155A, BCOT 118 or equivalent with a grade of Pass or "C" or appropriate work experience using Access.
This course provides the student for Microsoft Office User (MOUS) Access Core Certification.
Transfer Credit: CSU

CIS 160
WEB PAGE DEVELOPMENT 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
This course provides the knowledge, skills, and hands-on experience needed to create multi-media Web pages. Students will create Web pages with links, graphics, tables, frames, and form application, as well as dimensions of time, audio, video, motion, and interactivity to Web pages using 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 168C
SPECIAL TOPICS IN NETWORKING 3.0 UNITS
Class hours: 3.0 Lecture
This course is designed to provide training on the application of networking solutions to various industry specific situations. Each semester the course will focus on a different aspect of networking. Examples include but are not limited to, automotive, aviation, entertainment industry, health care, home automation, industrial control, IPv6 version 6, and recent developments in Local Area Networking (LAN) and Wide Area Networking (WAN). This course may be taken a maximum of 2 times.
Transfer Credit: CSU

CIS 169A
SPECIAL TOPICS IN SECURITY 1.0 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 171
VISUAL BASIC PROGRAMMING 3.0 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 course in designing and programming of the MS-Windows graphical user interface. Topics include standard interface design, event processing and control focus, data exchange, debugging and error handling.
Transfer Credit: CSU; UC

CIS 178
PROGRAMMING IN FORTRAN 3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: MATH 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, CIS189B 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 or appropriate work experience.
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. It 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
PROGRAMMING HTML
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) 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 DEVELPMENT   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.
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 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 administrating 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 administrating networks based on Windows 2000. Students will learn to install, configure,
and optimize Windows 2000, including network inter-operability and trouble shooting.

Transfer Credit: CSU

CIS 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 administrating networks involving Microsoft Windows 2000 Servers. Topics include installing and configuring Windows 2000 Server, managing files, printing, Web and Terminal services, connecting clients, creating and managing user accounts, managing access to resources on the network, monitoring and optimizing server performance, implementing security and disaster protection and troubleshooting various server related issues. This course also prepares students for the Microsoft certification exam 70-215 – Installing, Configuring, and Administering Microsoft Windows 2000 Server, which is one of the core requirements for the Microsoft Certified systems Administrator (MCSA) and Microsoft Certified Systems Engineer (MCSE) certifications.

Transfer Credit: CSU

CIS 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 replication and operation master, manage and restore the Active Directory database, and implement an Active Directory infrastructure. The course also prepares students for the Microsoft Certified Professional (MCP) Exam 70-217- a core requirement on the Windows 2000 Microsoft Certified Systems Engineer (MCSE) track.

Transfer Credit: CSU

CIS 213B
MICROSOFT ADVANCED
NETWORK INFRASTRUCTURE 3.5 UNITS

Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 212 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.

This course provides students with the information and skills needed to develop a plan for a network infrastructure based on Microsoft Windows server operating systems. Topics mainly focus on the designing aspects of various network services that can be provided by the server operating systems in areas such as Internet Protocol (IP) address assignments, name resolutions, IP routing, server clustering, and network infrastructure security. It also covers the objectives required by current Microsoft certifications, such as Microsoft Certified System Administrator (MCSA), Microsoft Certified System Engineer (MCSE), Microsoft Certified Technology Specialist (MCTS), and Microsoft Certified Information Technology Professional (MCSA) certification.

Transfer Credit: CSU

CIS 213D
DESIGNING A MICROSOFT
WINDOWS DIRECTORY
SERVICE INFRASTRUCTURE 3.5 UNITS

Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 212 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.

This course provides the knowledge and skills necessary to design a Microsoft® Windows® 2000 directory services infrastructure in an enterprise network. Strategies are presented to assist the student in identifying the information technology needs of an organization, and then designing an Active Directory™ structure that meets those needs.

Transfer Credit: CSU

CIS 213E
MANAGING WINDOWS 2000
NETWORK ENVIRONMENT 3.0 UNITS

Class hours: 2.5 Lecture
Prerequisite: CIS 213D or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.

This course is to provide the knowledge required by System Administrators, Network Administrators, and Information Technology (IT) professionals who implement, manage and troubleshoot existing network and server environments based on the Microsoft Windows® 2000 platform. These skills are generally required in medium to large size organizations via Local Areas Networks (LANs) and the Internet or Internets. Additionally, this course provides the skills and knowledge that Microsoft Certified Systems Administrator (MCSA) certification candidates need to prepare for the Microsoft Certified Professional (MCP) Exam 70-218: Managing a Microsoft Windows 2000 Network Environment, a core component for the Microsoft® Certified Systems Administrator (MCSA) certification.

Transfer Credit: CSU

CIS 213F
MICROSOFT WINDOWS
SERVER ADMINISTRATION 3.5 UNITS

Class hours: 3.0 Lecture/2.0 Laboratory
This course provides the knowledge required by system administrators, network administrators, and IT (Information Technology) professionals who implement, manage, and troubleshoot network and server environments based on the latest Microsoft Windows® platform. It offers up-to-date

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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. In addition, this course prepares students for a core Microsoft certification exam that will lead to such certifications as the Microsoft Certified System Engineer (MCSE), Microsoft Certified System Administrator (MCSA), Microsoft Certified Technology Specialist (MCTS), and Microsoft Certified Information Technology Professional (MCITP).

Transfer Credit: CSU

CIS 213G
MICROSOFT EXCHANGE
SERVER ADMINISTRATION  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 212B 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 IT (Information Technology) professionals who implement, manage and troubleshoot the Microsoft Exchange server. These skills are generally required in medium to very large computing environments that typically have multiple physical locations, mixed client connection protocols, and Internet messaging connectivity. In addition, this course is part of the Microsoft Certified Systems Engineer (MCSE) certification program series.

Transfer Credit: CSU

CIS 213I
IMPLEMENTING A WINDOWS 2003
NETWORK INFRASTRUCTURE  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, or appropriate work experience. This course provides instruction in planning, implementing, and administering a Windows 2003 network infrastructure. Topics include Domain Name System (DNS), Internet Protocols (IP) routing, Network Address Translation (NAT), and Certificate Services. This course covers the knowledge and skills needed for 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

CIS 213J
IMPLEMENTING A MICROSOFT
WINDOWS 2003
ACTIVE DIRECTORY  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 training on the knowledge and skills necessary to plan, install, manage, and troubleshoot Windows Server 2003 Active Directory. It also prepares students for the Microsoft Certified Professional examination 70-294: Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure, which is part of the core component for the Microsoft Certified Systems Engineer (MCSE) certification.

Transfer Credit: CSU

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 a core 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 221
ADVANCED VISUAL BASIC  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 familiarizes the students with client/server database programming, OLE (Object Linking and Embedding), DDE (Dynamic Data Exchange), API (Application Programming Interface), ActiveX controls, multimedia, and object-oriented programming design. The students develop practical business applications.

Transfer Credit: CSU

CIS 221A
OBJECT-ORIENTED
PROGRAMMING IN VB.NET  3.0 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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 223B
BUILDING ISERIES/400 WEB APPLICATIONS WITH ILE RPG  3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: CIS 175 and CIS 205 or equivalent with grades of Pass or "C" or higher.
This is a course on designing web applications on an IBM (International Business Machines) iSeries/400 midrange computer using knowledge of HTML (Hyper Text Marjup Language) and ILE RPG (Integrated Language Environment Report Program Generator). The course topics include configuring the HTTP (Hyper Text Transfer Protocol) server on the iSeries/400 and declaring HTTP server instances, JavaScript, TCP/IP (Transport Control Protocol/Internet Protocol), the iSeries/400 IFS (Integrated File System) and the use of API's (Application Program Interfaces). The language RPG is used to create CGI (Common Gateway Interface) programs that "web enable" existing RPG programs that produce output to terminal screens or spooled files for later printing.
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

CIS 220
ISERIES 400 CONTROL LANGUAGE PROGRAMMING  3.0 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: CIS 141 or equivalent with a grade of Pass or "C" or higher is strongly recommended.
This course covers the fundamental concepts required to develop control language programs for use on an IBM iSeries 400. Topics include: structured programming, program control, error handling, OS/400 concepts, and when to use CL programs.
Transfer Credit: CSU

CIS 271
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE  1.0 UNIT
Class hours: 1.0 Work Experience
One unit of Computer and Information Sciences 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. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second-, third-, and fourth-semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 3 times.
Transfer Credit: CSU

CIS 272
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE  2.0 UNITS
Class hours: 1.0 Work Experience
Two units of Computer and Information Sciences Occupational Work Experience require 120 non-paid hours of work or 150 paid hours of work per semester.
Announcement of Courses

Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second-, third-, and fourth-semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 3 times.

Transfer Credit: CSU

CIS 274
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS
Class hours: 1.0 Work Experience
Corequisite: Enrollment in 7 or more units, including Computer and Information Sciences Occupational Work Experience, or at least one other course during summer, in a computer-related major. Four units of Computer and Information Sciences Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.
First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

CIS 273
COMPUTER AND INFORMATION SCIENCES OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: 1.0 Work Experience
Three units of Computer and Information Sciences Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.
First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 4 times.

Transfer Credit: CSU

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 CGI Perl scripts to generate dynamic Web pages, process forms, search information, and provide informative responses. This course is not open to students who have already taken BCIS 94.

Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
CIS 285
ACTIVE SERVER PAGES PROGRMING 3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Recommendation: 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 3.0 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. 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). 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

COS 1 (Not Degree Applicable)
COSMETOLOGY 1.0 UNIT
Class hours: 3.3 Lecture/9.8 Laboratory
Prerequisite: CIS 50C, COS 54, COS 60B, COS 70A, or COS 71A with a grade of Pass or "C" or higher.
COS 1 is an introductory course providing an overview of the field 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 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 equivalent.
This is an introductory course providing an overview of the world of Cosmetology careers with appropriate work experience. Students will be introduced to the technical vocabulary, demonstrations 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 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 (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

COSMETOLOGY (Technology Division)

COS 1 (Not Degree Applicable)
COSMETOLOGY SALON PREPARATION 1.0 UNIT
Class hours: 3.1 Laboratory
Prerequisite: COS 50C, COS 54, COS 60B, or equivalent with grades of Pass or "C" or higher.
This course is designed to acquaint students with the State Board Certification. 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: 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 apply 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 apply 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 health, safety, sanitation, anatomy, and chemistry as they relate to the cosmetology profession.

COS 51A
INTERMEDIATE
COSMETOLOGY I  6.5 UNITS
Class hours: 3.3 Lecture/9.8 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 theory as it pertains to cosmetology. Students continue to develop manipulative skills in makeup, electric facials, facial waxing, arching, haircoloring, lighteners, color weaves, chemical restructuring, soft perm and conditioning to gain knowledge of tricology, 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 cutting, blowdrying, permanent waving, chemical waving, chemical straightening and hair coloring. Emphasis is placed on professionalism, client relationships and State Board examination preparation.

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 tricology, 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, and hair coloring. 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, 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
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 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, 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 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 the student to perform basic skills in chemical relaxer, soft perms, press and curl, facials and people skills. It provides an opportunity for the student to continue developing manipulative skill in hairstyling, hairsculpturing, haircoloring, permanent waving, manicuring, and pedicuring. Emphasis will be placed on the safety and sanitation as it relates to the cosmetology profession, professionalism and client relationships.

**COS 61A**
**INTERMEDIATE**
**COSMETOLOGY I** 10.0 UNITS
Class hours: 5.0 Lecture/15.0 Laboratory
Prerequisite: COS 50C or 60B or 70A or 71B 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 thermal hairstyling, wet hairstyling, chemical waving, hairsculpturing, salesmanship, long hairstyling, chemical relaxing, make-up, conditioning, manicuring, and to gain knowledge of trichology, dermatology, and chemistry, as they relate to cosmetology. People skills, press and curl, hair design, and men's hairstyling will also be studied. Emphasis is placed on professionalism and client relationships.

**COS 61B**
**INTERMEDIATE**
**COSMETOLOGY II** 10.0 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 manipulative skills in thermal hairstyling, wet hairstyling, chemical waving, hairsculpturing, salesmanship, long hairstyling, chemical relaxing, make-up, conditioning, manicuring, and to gain knowledge of trichology, dermatology, and chemistry, as they relate to cosmetology. People skills, press and curl, hair design, and men's hairstyling will also be studied. Emphasis is placed on professionalism and client relationships.

**COS 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, hairsculpturing, conditioning, reconstruction, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation.

**COS 62B**
**ADVANCED COSMETOLOGY II** 10.0 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, 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 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 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 consider developing manipulative skills in hair coloring, thermal hairstyling, chemical waving, chemical straightening, facials, make-up, manicuring. Emphasis is placed on professionalism and personal/client relationships.

COS 71A
**INTRODUCTORY COSMETOLOGY**  **4.0 UNITS**
Class hours: 2.0 Lecture/6.0 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 provides an opportunity for the student 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 71B
**INTRODUCTORY 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 press and curl, braiding, female and men's hairsculpture, and how to relate to people. It provides an opportunity for students to continue developing manipulative skill in hairstyling, haircoloring, permanent waving, manicuring, and pedicuring. Emphasis will be placed on safety and sanitation as it relates to the cosmetology profession, professionalism, and the client.

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 hair coloring, thermal hairstyling, chemical waving, chemical straightening, facials, make-up, and manicuring. Emphasis is placed on professionalism, client relationships and State Board examination preparation. This course may be taken a maximum of 2 times as necessary to complete 1600 hours.

COS 72B
**INTERMEDIATE 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 73A
**ADVANCED COSMETOLOGY I**  **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 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 73B
**ADVANCED COSMETOLOGY II**  **4.0 UNITS**
Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: A valid Cosmetology license and five years verified work experience.
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 is the first of two sequenced courses designed to prepare the licensed cosmetologist for the cosmetology instructor examination as required by the Board of Barbering and Cosmetology. Content includes demonstrations on teaching with the student participating in both lectures of related information and practical demonstration of topics that are required for State Board licensure.
COS 80B
INSTRUCTION TECHNIQUES IN COSMETOLOGY II 10.0 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). 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 (2 units for 108 hours). This course may be taken a maximum of 2 times.

COUNSELING
(Counseling & Guidance Division)

COUN 10 (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. (Formerly CG 1)

COUN 20 (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 a maximum of 2 times. (Formerly CG 2)

COUN 33 (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. (Formerly CG 3)

COUN 34 (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. (Formerly CG 4)

COUN 35 (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. (Formerly CG 5)

COUN 36 (Not Degree Applicable)
FAMILY LIVING FOR THE STUDENT WITH DISABILITIES 1.0 UNIT
Class hours: 1.0 Lecture
This course 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 a maximum of 4 times. (Formerly CG 6)

COUN 50
ORIENTATION AND EDUCATIONAL PLANNING 0.5 UNIT
Class hours: 0.5 Lecture
This course is designed to introduce students to services offered at Cerritos College; the history and mission of the system of post-secondary education system in California; policies and procedures which affect students at Cerritos College; educational planning, including major and general education requirements, course sequencing, and transfer requirements for the California State University and University of California systems. As part of the course, students will tour the Cerritos College campus, acquainting themselves with the location and function of various offices and service providers. Each student will produce an educational plan specific to her or his educational goal. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 4 times. (Formerly CG 50)

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Announcement of Courses

COUN 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. (Formerly CG 100)
Transfer Credit: CSU

COUN 150
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. (Formerly CG 150)
Transfer Credit: CSU

COUN 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. (Formerly CG 200)
Transfer Credit: CSU

COUN 210
JOB SEARCH STRATEGIES  1.0 UNIT
Class hours: 1.0 Lecture/0.5 Laboratory
Recommendation: 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. (Formerly CG 210)
Transfer Credit: CSU

COUN 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 admissions 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. (Formerly CG 220)
Transfer Credit: CSU

COUN 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). 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. (Formerly CG 298)
Transfer Credit: CSU

COUN 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 (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. (Formerly CG 299)
Transfer Credit: CSU

COURT REPORTING & CAPTIONING CAREERS
(Business Education Division)

CRCC 1T (Not Degree Applicable)
COMPUTER-AIDED TRANSCRIPTION LAB  1.0 UNIT
Class hours: 4.0 Laboratory
Open Entry/Open Exit
This lab course is designed for students in the Court Reporting and Captioning Careers Department to complete computer-aided transcription, CAT tutorials, and practice assignments from their court reporting courses that require this lab. (Formerly BUSC 1T)

CRCC 5T (Not Degree Applicable)
CSR QUALIFYING EXAM TRANSCRIPTION LAB  2.0 UNITS
Class hours: 6.0 Laboratory
Open Entry/Open Exit
This course assists development in transcription of the Certified Shorthand Reporters (CSR) Qualifying Exam for students preparing to take the State CSR Exam. (Formerly BUSC 5T)

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-

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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 an introduction to the use 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 CATalyst software for 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 CATalyst 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 CATalyst 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)

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 the 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 a maximum of 2 times. (Formerly BUSC 50)

CRCC 57A
BEGINNING AURAL LANGUAGE SKILLS FOR COURT REPORTERS  3.0 UNITS
Class hours: 3.0 Lecture
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  3.0 UNITS
Class hours: 3.0 Lecture
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
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). 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 (2 units for 108 hours). This course may be taken a maximum of 2 times. (Formerly BUSC 99)

CRCC 113
LEGAL TERMINOLOGY  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Recommendation: CRCC 140 or equivalent with a grade of Pass or "C" or higher.
This course is designed to familiarize the students with legal terminology, which will prepare the students to become proficient in recognizing, using, and spelling legal terminology. This course will help the students master unfamiliar keying patterns and enhance the development of computerized shorthand skills. (Formerly BUSC 113)

Transfer Credit: CSU

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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, and 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 114, 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 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Recommendation:  CRCC 141, CRCC 142 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 a maximum of 2 times. (Formerly BUSC 119A)
Transfer Credit: CSU

CRCC 119B
INTERMEDIATE COMPUTER-AIDED
TRANSCRIPTION 2.5 UNITS
Class hours: 2.0 Lecture/2.0 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 create personal dictionaries on a disk. This course may be taken a maximum of 3 times. (Formerly BUSC 119B)
Transfer Credit: CSU

CRCC 119C
ADVANCED COMPUTER-AIDED
TRANSCRIPTION 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Recommendation:  CRCC 119B, 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 a maximum of 3 times. (Formerly BUSC 119C)
Transfer Credit: CSU

CRCC 119D
BASIC CONCEPTS
OF REALTIME 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Recommendation: CRCC 119C 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 a maximum of 3 times. (Formerly BUSC 119D)
Transfer Credit: CSU

CRCC 119E
COMPUTER-AIDED
MEDICAL DICTIONARY BUILD 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Recommendation: CRCC 114 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 a maximum of 3 times. (Formerly BUSC 119E)
Transfer Credit: CSU

CRCC 119F
COMPUTER-AIDED
LEGAL DICTIONARY BUILD 2.5 UNITS
Class hours: 2.0 Lecture/2.0 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 in 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 119F)
Transfer Credit: CSU
path in legal transcribing or court reporting. It provides a systematic approach toward building a basic legal computer-aided transcription (CAT) dictionary. Entries into the CAT dictionary include Latin and Greek prefixes, suffixes, roots, and combining forms of legal terminology used in various aspects of the legal system. This course may be taken a maximum of 3 times. (Formerly BUSC 119F)

Transfer Credit: CSU

CRCC 119G
COMPUTER-AIDED TRANSCRIPTION FOR SCOPISTS  2.5 UNITS
Class hours: 2.0 Lecture/2.0 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.

Transfer Credit: CSU

CRCC 126
COMPUTERIZED SHORTHAND REALTIME PRACTICUM II  (120-150 WPM)  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
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, multiple-voice testimony, Final Argument, Opening Statement and Conference at the Bench broaden keying vocabulary. This course may be taken a maximum of 3 times. (Formerly BUSC 126)

Transfer Credit: CSU

CRCC 127
COMPUTERIZED SHORTHAND REALTIME PRACTICUM III  (140-170 WPM)  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
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 a maximum of 3 times. (Formerly BUSC 127)

Transfer Credit: CSU

CRCC 128
COMPUTERIZED SHORTHAND REALTIME PRACTICUM IV  (160-190 WPM)  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T and CRCC 5T
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 a maximum of 4 times. (Formerly BUSC 128)

Transfer Credit: CSU

CRCC 129
COMPUTERIZED SHORTHAND REALTIME PRACTICUM V  (180-210 WPM)  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T and CRCC 5T
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 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 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.

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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 a maximum of 2 times. (Formerly BUSC 139) Transfer Credit: CSU

CRCC 140
COMPUTERIZED SHORTHAND THEORY 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 141
Recommendation: BCOM 46 or equivalent with a grade of Pass or "C" or higher. Minimum typing speed of 35 wpm or enrollment in a typing class.
This first-semester course covers the basic theory of computer-compatible shorthand and mastery of the stenotype keyboard. Therefore, a machine is not required. Students will learn theory and learn to read and transcribe the notes of the court reporter. (Formerly BUSC 140A) Transfer Credit: CSU

CRCC 140A
COMPUTERIZED SHORTHAND THEORY A 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Corequisite: CRCC 141A
Recommendation: Minimum typing speed of 35 wpm or enrollment in a typing class.
This first-semester course covers the basic theory of computer-compatible shorthand and mastery of the stenotype keyboard. (Formerly BUSC 140A) Transfer Credit: CSU

CRCC 140B
COMPUTERIZED SHORTHAND THEORY B 2.5 UNITS
Class hours: 2.0 Lecture/2.0 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 FOR SCOPISTS 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 141T
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 theory and learn to read and transcribe the notes of the court reporter. (Formerly BUSC 140B) Transfer Credit: CSU

CRCC 141
COMPUTERIZED SHORTHAND THEORY REVIEW/SKILL DEVELOPMENT 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 141T
Recommendation: Minimum typing speed of 35 wpm or enrollment in a typing class.
This course is an intensive review of the basic theory of computer-compatible shorthand and is designed to complement the corresponding theory class through review of the lessons as they are completed. This course may be taken a maximum of 2 times. (Formerly BUSC 141) Transfer Credit: CSU

CRCC 141A
COMPUTERIZED SHORTHAND THEORY REVIEW/SKILL DEVELOPMENT A 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Corequisite: CRCC 141A
Recommendation: CRCC 140. Minimum typing speed of 35 wpm or enrollment in a typing class.
This course is an intensive review of the first semester of the basic theory of computer-compatible shorthand and is designed to complement the corresponding theory class through review of the lessons as they are completed. This course may be taken a maximum of 2 times. (Formerly BUSC 141A) Transfer Credit: CSU

CRCC 141B
COMPUTERIZED SHORTHAND THEORY REVIEW/SKILL DEVELOPMENT B 2.5 UNITS
Class hours: 2.0 Lecture/2.0 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 a maximum of 2 times. (Formerly BUSC 141B) Transfer Credit: CSU

CRCC 142
INTERMEDIATE COMPUTERIZED SHORTHAND 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
Recommendation: CRCC 119A, CRCC 140 or equivalent with grades of Pass or "C" or higher.
This course provides the basis for developing, refining, and improving machine skill and speed and is designed for the 60 to 70 word-per-minute speed student. Emphasis is placed on frequently used words and phrases, word families, number drills, legal terms, literary and business dictation, and two-voice question and answer testimony. This course may be taken a maximum of 2 times. (Formerly BUSC 142) Transfer Credit: CSU

CRCC 143
COMPUTERIZED SHORTHAND SPEED BUILDING I 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
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 and is designed for the 80 to 90 word-per-minute speed student. In addition to the areas emphasized in previous classes, jury charge and multiple-voice colloquy are included. This course may be taken a maximum of 2 times. (Formerly BUSC 143) Transfer Credit: CSU

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CRCC 144
COMPUTERIZED SHORTHAND
SPEED BUILDING II  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
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 and is designed for the 100 to 110 word-per-minute speed student. Latin and French words, Congressional Record, multiple-voice testimony, legal opinions, and expert opinion materials are included. This course may be taken a maximum of 2 times. (Formerly BUSC 146)
Transfer Credit: CSU

CRCC 145
COMPUTERIZED SHORTHAND
SPEED BUILDING III  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
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 and is designed for the 120 to 130 word-per-minute speed student. Latin and French words, Congressional Record, multiple-voice testimony, final argument, opening statement, and conference at the bench broaden keying vocabulary. This course may be taken a maximum of 3 times. (Formerly BUSC 145)
Transfer Credit: CSU

CRCC 146
COMPUTERIZED SHORTHAND
SPEED BUILDING (140-170 WPM)  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
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 and is designed for the 140 to 150 word-per-minute speed student. This course may be taken a maximum of 3 times. (Formerly BUSC 146)
Transfer Credit: CSU

CRCC 147
COMPUTERIZED SHORTHAND
SPEED BUILDING (160-190 WPM)  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
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 and is designed for the 160 to 170 word-per-minute speed student. In addition, this course is designed to prepare advanced students for various state and city hearing reporter examinations and employment. This course may be taken a maximum of 4 times. (Formerly BUSC 147)
Transfer Credit: CSU

CRCC 148
COMPUTERIZED SHORTHAND
SPEED BUILDING (180-210 WPM)  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T and CRCC 5T
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. This course is designed for the 180 to 190 word-per-minute speed student. Simulated courtroom proceedings will be used as a means to qualify for the State Boards. This course may be taken a maximum of 4 times. (Formerly BUSC 148)
Transfer Credit: CSU

CRCC 149
COMPUTERIZED SHORTHAND
SPEED BUILDING (190-225 WPM)  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T and CRCC 5T
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 and is designed for the 200 to 225 word-per-minute speed student. In addition, this course offers a comprehensive academic review in preparation for the Certified Shorthand Reporters and the National Court Reporters examinations. This course may be taken a maximum of 4 times. (Formerly BUSC 149)
Transfer Credit: CSU

CRCC 152
INTRODUCTION TO
JURY CHARGE INTERMEDIATE
COMPUTERIZED SHORTHAND  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
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 a maximum of 2 times. (Formerly BUSC 152)
Transfer Credit: CSU

CRCC 153
MULTIPLE-VOICE COLLOQUY I
COMPUTERIZED SHORTHAND
SPEED BUILDING I  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
Recommendation: Minimum stenotype speed of 70 wpm and a minimum typing speed of 43 wpm. This short-term, intensive course promotes the development of speed, accuracy, and formatting techniques in reporting and
transcribing multiple-voice colloquy. This course develops proficiency in recording
colloquy at speeds ranging from 80-110 wpm.
Sustained dictation consists of multiple-
voice colloquy, jury charge, and two-voice testimony. This course may be taken a
maximum of 2 times. (Formerly BUSC 153)
*Transfer Credit: CSU*

**CRCC 154**
**INTRODUCTION TO CONGRESSIONAL RECORD**
**COMPUTERIZED SHORTHAND SPEED BUILDING II**
**3.0 UNITS**
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
Recommendation: Minimum stenotype speed of 90 wpm and minimum typing speed
of 47 wpm.
This short-term, intensive course introduces methodology of reporting and transcribing
Congressional Record material and develops punctuation skills, formatting techniques, and
stenotype speed for this aspect of reporting. Sustained dictation consists of Congressional
Record, jury charge, and two-voice testimony. This course develops proficiency in recording
Congressional Record material at speeds ranging from 100-130 wpm. This course may
be taken a maximum of 2 times. (Formerly BUSC 154)
*Transfer Credit: CSU*

**CRCC 155**
**MULTIPLE-VOICE COLLOQUY II**
**COMPUTERIZED SHORTHAND SPEED BUILDING III**
**3.0 UNITS**
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
Recommendation: Minimum stenotype speed of 110 wpm and minimum typing speed
of 50 wpm.
This short-term, intensive course further promotes the development of speed, accuracy,
and formatting techniques in reporting and transcribing increasingly complex multiple-
voice colloquy. This course develops proficiency in recording colloquy at speeds ranging from
120-150 wpm. Sustained dictation consists of multiple-voice colloquy, jury charge,
Congressional Record, and two-voice testimony. This course may be taken a maximum of 3
times. (Formerly BUSC 155)
*Transfer Credit: CSU*

**CRCC 156**
**JURY VOIR DIRE PROCEDURES**
**COMPUTERIZED SHORTHAND SPEED DEVELOPMENT**
**(140-170 WPM)**
**3.0 UNITS**
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
Recommendation: Minimum stenotype speed of 130 wpm and minimum typing speed
of 55 wpm.
This short-term, intensive course is designed to introduce methodology of reporting
jury voir dire and to develop management techniques and stenotype speed for this aspect
of reporting. The course develops proficiency in recording jury voir dire proceedings and
jury charge at speeds ranging from 150-160 wpm. This course may be taken a maximum
of 3 times. (Formerly BUSC 156)
*Transfer Credit: CSU*

**CRCC 157**
**CONGRESSIONAL TESTIMONY**
**COMPUTERIZED SHORTHAND SPEED DEVELOPMENT**
**(160-190 WPM)**
**3.0 UNITS**
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T
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 a total of 3 times. (Formerly
BUSC 157)
*Transfer Credit: CSU*

**CRCC 158**
**PROFESSIONAL PRACTICES**
**HEARINGS/CONFERENCES**
**COMPUTERIZED SHORTHAND SPEED DEVELOPMENT**
**(180-210 WPM)**
**3.0 UNITS**
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T and CRCC 5T
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 a maximum of 4 times.
(Formerly BUSC 158)
*Transfer Credit: CSU*

**CRCC 159**
**IN CURIA/IN CAMERA PROCEDURES**
**COMPUTERIZED SHORTHAND SPEED DEVELOPMENT**
**(190-225 WPM)**
**3.0 UNITS**
Class hours: 2.0 Lecture/4.0 Laboratory
Corequisite: CRCC 1T and CRCC 5T
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 a maximum of 3 times. (Formerly
BUSC 159)
*Transfer Credit: CSU*

**CRCC 162**
**Q AND A SPEED BUILDING I**
**3.0 UNITS**
Class hours: 2.0 Lecture/4.0 Laboratory
Recommendation: Completion of Court Reporting Theory classes with grades of Pass
or "C" or higher. Minimum typing speed of
40 wpm or enrollment in a keyboarding class.
Completion of or concurrent enrollment in CRCC 119A.
This course introduces two-voice question and answer (Q and A) dictation at speeds
beginning at 40 words-per-minute up to 90
wpm to students who have completed court
reporting Theory classes and are working on completing their 60, 70, 80, and 90 wpm
dictation tests. Frequently used words and phrases, word families, number drills, legal
terms, literary, jury charge, and business
dictation are also introduced. This course may
be taken a maximum of 4 times.
*Transfer Credit: CSU*
CRCC 164ABCD  
**Q AND A SPEED BUILDING II  3.0 UNITS**  
Class hours: 2.0 Lecture/4.0 Laboratory  
Recommendation: Completion of 90 word-per-minute speed tests. Minimum typing speed of 47 to 50 wpm or enrollment in a keyboarding class. Concurrent enrollment in CRCC 119B or CRCC 119C class. This course covers two-voice question and answer (Q and A) dictation at speeds beginning at 100 words-per-minute up to 130 wpm. Jury charge and business dictation are also given. Congressional Record is introduced at 120 wpm. This course may be taken a maximum of 4 times.  
*Transfer Credit: CSU*

CRCC 166 ABCD  
**Q AND A SPEED BUILDING III  3.0 UNITS**  
Class hours: 2.0 Lecture/4.0 Laboratory  
Recommendation: Completion of 130 word-per-minute speed tests. Minimum typing speed of 57 to 60 wpm or enrollment in a keyboarding class. Concurrent enrollment in CRCC 199C or CRCC 119D class. This course covers two-voice question and answer (Q and A) dictation at speeds beginning at 140 words-per-minute up to 170 wpm. Congressional, jury charge, multiple-voice, and literary dictations are also given at the corresponding speeds. This course may be taken a maximum of 4 times.  
*Transfer Credit: CSU*

CRCC 168 ABCD  
**Q AND A SPEED BUILDING IV  3.0 UNITS**  
Class hours: 2.0 Lecture/4.0 Laboratory  
Recommendation: Completion of 170 word-per-minute speed tests. Minimum keyboarding speed of 60 wpm or enrollment in a typing class. Concurrent enrollment in CRCC 119E or CRCC 119F class. Concurrent enrollment in CRCC 185. This course covers two-voice question and answer (Q and A) dictation at speeds beginning at 180 words-per-minute up to 190 wpm. Congressional, jury charge, multiple-voice, and literary dictations are also given at the corresponding speeds. This course may be taken a maximum of 4 times.  
*Transfer Credit: CSU*

CRCC 169 ABCD  
**Q AND A SPEED BUILDING V  3.0 UNITS**  
Class hours: 2.0 Lecture/4.0 Laboratory  
Recommendation: CRCC 185 or equivalent with A grade of Pass or "C" or higher. Completion of 190 word-per-minute speed tests. Minimum keyboarding speed of 60 wpm or enrollment in a keyboarding class. This course covers two-voice question and answer (Q and A) dictation at speeds beginning at 200 words-per-minute up to 225 wpm. Congressional, jury charge, multiple-voice, and literary dictations are also given at the corresponding speeds. This course may be taken a maximum of 4 times.  
*Transfer Credit: CSU*

CRCC 173  
**COURT REPORTING AND CAPTIONING CAREERS**  
**OCCUPATIONAL WORK EXPERIENCE  3.0 UNITS**  
Class hours: 1.0 Work Experience  
Corequisite: 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.  
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*

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 a maximum of 4 times.  
*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 90 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.  
*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 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 to type 40 wpm.
This formatting relates to all types of legal and court documents including deposition transcripts. This course may be taken a maximum of 2 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: 1.0 Work Experience
One (1) hour control class each week plus 15 hours of employment per week. The employment must be in a job related to the student’s educational goal. 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 2 times based on the number of hours on the job.

CA 44 (Not Degree Applicable)
OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS
Class hours: 1.0 Work Experience
One (1) hour control class each week plus 20 hours of employment per week. The employment must be in a job related to the student’s educational goal. 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 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.
This course introduces the student to the ingredients, methods, and skills used 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 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 65  
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 80  
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 81  
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 82  
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 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). This course may be taken a maximum of 2 times.

CA 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 (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, Dance, Athletics Division)  

DAN 100  
INDIVIDUALIZED DANCE DEVELOPMENT  
1.0 UNIT  
Class hours: 4.0 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)

DAN 101  
HISTORY OF DANCE  
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

DAN 105  
INTRODUCTION TO  
DANCE MOVEMENT  
3.0 UNITS  
Class hours: 2.0 Lecture/3.0 Laboratory  
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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
DANC 106A  
BEGINNING BALLET  2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
Students will study basics of ballet terminology and technique. Emphasis is on body alignment, coordination and musicality. This course may be taken a maximum of 2 times. (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 the advanced terminology and technique of classical ballet. This course may be taken for a maximum of 2 times. (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 a maximum of 4 times. (Formerly PE 196)  
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 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 skills and will utilize basic movement and music principles to choreograph dance sequences. This course may be taken 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 a maximum of 4 times. (Formerly PE 199)  
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 industrial shows and commercials. It offers instruction in current trends of popular dance. This course may be taken a maximum of 4 times. (Formerly PE 195)  
Transfer Credit: CSU; UC

DANC 112  
MIDDLE EASTERN DANCE  2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
The course will introduce students to the dance form from its traditional styles to a fusion of Eastern and Western dance styles. This course may be taken a maximum of 4 times. (Formerly PE 198)  
Transfer Credit: CSU; UC

DANC 119  
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. This course may be taken a maximum of 2 times. (Formerly PE 185)  
Transfer Credit: CSU; UC

DANC 120  
LATIN SOCIAL 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, rumba, samba and other selected styles will be included. This course may be taken a maximum of 4 times. (Formerly PE 193)  
Transfer Credit: CSU; UC

DANC 121  
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 197)  
Transfer Credit: CSU; UC

DANC 122  
CHOREOGRAPHY  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 taken a maximum of 4 times. (Formerly PE 196)  
Transfer Credit: CSU; UC

DANC 123  
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, rumba, samba and other selected styles will be included. This course may be taken a maximum of 4 times. (Formerly PE 194)  
Transfer Credit: CSU; UC

DANC 124  
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 a maximum of 4 times. (Formerly PE 184)  
Transfer Credit: CSU; UC

DANC 125  
INTRODUCTION TO COMMERCIAL DANCE  2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
This course is designed to introduce modern dance work used in film, concert dance, television and industrial shows and commercials. It offers instruction in current trends of popular dance. This course may be taken a maximum of 4 times. (Formerly PE 188)  
Transfer Credit: CSU; UC

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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 Kinesography 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 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 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 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 theater. The advanced student will participate in performances on campus as well as in the community. This course may be taken a maximum of 4 times. (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 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 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 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 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 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

DENTAL ASSISTING
(Health Occupations Division)

DA 1 (Not Degree Applicable)
DENTAL RADIATION SAFETY LICENSING  1.5 UNITS
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 credit/no credit basis only.

DA 51
APPLIED DENTAL SCIENCE I  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
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...

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includes procedures in managing asepsis, infection and hazard control consisting of maintenance, disinfection and sterilization of equipment, supplies, and disposal of hazardous waste pertaining to patient care.

**DA 52**  
**DENTAL RADIOGRAPHY I  2.0 UNITS**  
Class hours: 1.0 Lecture/3.0 Laboratory  
This course is a study of the dental x-ray, the characteristics and methods of controlling x-radiation, types of film used, methods of processing, identifying, and mounting radiographs, radiation safety procedures, interpretation of radiographs, and an analysis of technique errors. It includes modern intra-oral dental and extra-oral radiographic techniques, arrangement and care of the darkroom 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.

**DA 53**  
**INTRODUCTION TO CHAIRSIDE ASSISTING  3.0 UNITS**  
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 a health history, charting, terminology, positioning of patient-operator- auxiliary for four-handed dental procedures, assisting with administration of local anesthetics, placement of a rubber dam, instrument exchange, oral evacuation, retraction, illumination, and assisting with endodontic procedures. Cardiopulmonary resuscitation is included as part of the course content.

**DA 54**  
**INTRODUCTION TO OPERATORY PROCEDURES  4.0 UNITS**  
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.

**DA 61**  
**APPLIED DENTAL SCIENCE II  3.0 UNITS**  
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  2.0 UNITS**  
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.

**DA 63**  
**ADVANCED CHAIRSIDE ASSISTING  4.0 UNITS**  
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.

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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, extra-oral, and digital radiography with laboratory experience and analysis of technique 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

DH 120
PREVENTIVE DENTISTRY II 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: DH 114 and HO 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 a grade 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 clinical 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 a grade of Pass or "C" or higher.
Corequisite: DH 125.
This course provides the student with clinical experiences in the practical application of dental procedures to perform comprehensive oral hygiene services. Students are scheduled at off-campus dental clinics with supervision from the Cerritos College Dental Hygiene Faculty and will have the opportunity to observe various dental specialties.
Transfer Credit: CSU

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DH 126
GENERAL AND
ORAL PATHOLOGY 2.0 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
Prerequisite: DH 126, 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 management of oral pathologic conditions and associated systemic disorders.
Transfer Credit: CSU

DH 127
PHARMACOLOGY 2.0 UNITS
Class hours: 2.0 Lecture
Prerequisite: DH 116 or equivalent with grades of Pass or "C" or higher.
Corequisite: DH 125C and DH 128.
This course covers the general principles of pharmacology, effects of therapeutic agents utilized in dental practice, an overview of medicinally 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 pharmacologic 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 a grade 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 a grade 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 interact with 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 students will cover 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 a grade 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 238
COMMUNITY OUTREACH I 1.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
Prerequisite: DH 125C or equivalent with grades 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

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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 multicultural 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 248
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 249
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). 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 (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

DISABLED STUDENT PROGRAMS & SERVICES (DSPS)

DSPS 86
INTRODUCTION TO UNIVERSAL DESIGN FOR LEARNING 2.0 UNITS
Class hours: 2.0 Lecture
Students will be introduced to the history and principles of Universal Design, the broad range of human abilities, and numerous real-world examples of designs that satisfy the principles. By the end of the course, students should have an appreciation for the diversity of the human race and be able to recognize universal design, as well as unnecessary obstacles that may be designed into products and environments when usability is not considered. This course is designed for students with learning, physical, communicative, or other disabilities, as well as for those who want to enhance their understanding of universal design principles to apply to teaching and learning environments.

DSPS 87
USING SCAN-READ TECHNOLOGY IN UDL 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: Completion of DSPS 86 or equivalent with a grade of Pass or "C" or higher.
This course is designed to teach the principles of Universal Design for Learning (UDL) using scan-and-read programs to facilitate the development of collegiate reading and writing skills. The assistive technology is used as a way to close the achievement gap between students with disabilities and their non-disabled peers. Students will learn to customize the software to assist all students’ needs and learning preferences. This course is appropriate for students with learning, physical, communicative, or other disabilities, as well as for students who want to enhance their learning skills by incorporating the principles of universal design to assistive technology scan and read software.

DPS 88
USING VOICE RECOGNITION TECHNOLOGY IN UDL 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: Completion of DPS 86 or equivalent with a grade of Pass or "C" or higher.
This course is designed to teach the principles of Universal Design for Learning (UDL) using voice recognition software, such as Dragon Naturally Speaking, to facilitate the development of collegiate reading and writing skills. The technology is used as a way to close the achievement gap between students with disabilities and their non-disabled peers. The voice recognition software can be customized to assist all students’ needs and learning preferences. This course is appropriate for students with learning, physical, communicative, or other disabilities as well as for those who want to enhance their learning skills by incorporating the principles of universal design to assistive technology.

DPS 89
BUILDING PERCEPTUAL REASONING SKILLS IN UDL 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: Completion of DPS 86 or equivalent with a grade of Pass or "C" or higher.
This course is designed to teach the principles of Universal Design for Learning (UDL) using assistive technology programs to facilitate the development of perceptual reasoning and critical thinking skills. The technology is used as a way to close the achievement gap between students with disabilities and their non-disabled peers. Students will learn to customize the software according to their unique needs and learning preferences. This course is appropriate for students with learning, physical, communicative, or other disabilities as well as for those who want to gain skills and enthusiasm for learning incorporating the UDL principles through technology targeted toward building perceptual reasoning skills.

EARTH SCIENCE
(Science, Engineering, Math Division)

ESCI 101
PHYSICAL GEOLOGY 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 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 102
PHYSICAL GEOLOGY 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.

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 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: ESCI 110, or GEOL 101, or GEOG 101, or GEOG 101L with a grade of Pass or "C" or higher.
This course is designed primarily for earth science, geology, or geography majors. It focuses on the use and care of laboratory and field equipment necessary for the preparation of field and laboratory demonstrations. An introduction to stockroom procedures may be included. This course may be taken 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). 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 (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

ECONOMICS
(Humanities, Social Sciences Division)

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

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 is an introductory course that focuses on the use and care of laboratory and field equipment necessary for the preparation of field and laboratory demonstrations. An introduction to stockroom procedures may be included. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

ECON 202  (CAN ECON 4)
PRINCIPLES OF MICROECONOMICS  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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). This course may be taken a maximum of 2 times.
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_

**EDCON 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 (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**

(Humanities, Social Sciences Division)

**EDEL 100**

**INTRODUCTION TO TEACHING AND LEARNING IN DIVERSE CONTEMPORARY CLASSROOMS** 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 sociology 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). 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 (EDT)**

(Tech Training and Distance Education)

**EDT 19**

**FUNDAMENTALS OF TELECONFERENCE** 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 a maximum of 4 times.

**EDT 20**

**TELECONFERENCE 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 a maximum of 2 times.

**EDT 21**

**TELECONFERENCE TELEMATICS** 1.0 UNIT

Class hours: 1.0 Lecture

This course develops students' facility in small rooms and seminars. Emphasis is placed on safety, scheduling, event planning, wrap-around activities, audio and video fundamentals, audiographics, and networking. Students will critically review videos of professional, small-group encounters. This course may be taken a maximum of 2 times.
EDT 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 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 teleconference events. This course may be taken 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 a maximum of 3 times.

EDT 43
EDUCATIONAL OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: 1 lecture
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.

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 products 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 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.

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EDT 67
INSPIRATION PRESENTATIONS  1.0 UNIT
Class hours: 1.0 Lecture
This course is intended to teach educators the basics of Inspiration, an “idea-mapping” and outlining software tool used in education. Students will create presentation diagrams and outlines to build and reinforce ideas. Students will learn to link presentations directly to the World Wide Web. Using the Internet and other resources, students will create lesson plans to incorporate into their curricula. This course may be taken for a maximum of 4 times.

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.

EDT 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). 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
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 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 to improve their skills in creating effective learning resources using suitable technologies.
Transfer Credit: CSU

EDT 101
CREATING CURRICULUM PROJECTS USING THE INTERNET  1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: EDT 100 or equivalent with a grade of Pass or “C” or higher. 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 who wish to learn about the Internet through innovative curriculum projects. Participants will use fundamental Internet search methods, e-mail and web sites in the creation of an Internet-based project supporting project- or problem-based learning. A supportive learning community will be provided where educators collaborate and improve their skills in creating effective learning resources using suitable technologies. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues.
Transfer Credit: CSU

EDT 102
CREATING TECHNOLOGY-BASED CURRICULUM  1.0 UNIT
Class hours: 1.0 Lecture
Recommendation: EDT 110 or equivalent with a grade of Pass or “C” or higher.
This course is for educators and future educators who wish to expand their Internet and technology-integration skills to be used when developing classroom curriculum. Participants will learn to create Internet ready curriculum and methods for using a website in the classroom. A supportive learning environment will be provided where educators and future educators collaborate to improve their skills in creating effective learning resources using suitable technologies.
Transfer Credit: CSU

EDT 103
SPREADSHEETS FOR EDUCATORS  2.0 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 to use efficiently technology to perform administrative, instructional, and other classroom tasks using electronic spreadsheet software. Spreadsheet-specific topics include the fundamentals of creating worksheets; formulas and functions; creating charts; using Wizards; techniques to manipulate large worksheets and multiple-sheet workbooks; and integration of spreadsheet software into course curriculum. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

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EDT 104
WORD PROCESSING FOR EDUCATORS 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 who wish to learn how to work with word processing documents as they prepare curriculum. Participants will use basic and intermediate word processing functions to create administrative, instructional, and classroom management documents. Word processing topics include creating, editing, saving, formatting, printing, spell checking, searching, replacing, headers and footers, footnotes and hyphenation, thesaurus, macros, merging and outlining functions. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues. This course may be taken for a maximum of 2 times.
Transfer Credit: CSU

EDT 105
POWERPOINT FOR EDUCATORS 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 who wish to learn how to work with Microsoft PowerPoint as a mode of teaching and as they prepare curriculum. Participants will use basic and intermediate presentation graphic software functions to create administrative, instructional, and classroom management materials. Topics include creating, managing, and delivering a multi-media curriculum-based presentation. Students will produce conceptual and data-intensive presentations, create professional output for overheads, on-screen presentations, speaker notes, and support handouts incorporating text and graphics. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues. This course may be taken for a maximum of 2 times.
Transfer Credit: CSU

EDT 106
ACCESS FOR EDUCATORS 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 database management systems using Microsoft Access. Topics include techniques for building a database, tables, queries, forms, and reports. Other topics include designing curricular lessons and student assignments utilizing databases. This course may be taken for a maximum of 2 times.
Transfer Credit: CSU

EDT 107
DESKTOP PUBLISHING 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 provides an introduction to the functions of desktop publishing software with an emphasis on the educational community. Topics include creating camera-ready printed presentation materials and developing presentation materials such as letterhead stationery, signs and flyers, newsletters, and a personal portfolio. Other topics include impact of technology on education; past, current, and future technology trends; and copyright issues.
Transfer Credit: CSU

EDT 108
PHOTOSHOP ELEMENTS FOR EDUCATORS 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: EDT 50 or EDT 51 and EDT 52 or EDT 53 or equivalent with a grade of Pass or "C" or higher.
This course covers the basic through advanced features of Adobe Photoshop Elements. Students will be introduced to the fundamentals of Adobe Photoshop Elements while discovering practical and creative uses of the application to increase speed and quality of learning in the classroom. Methods of integrating this software into the educational setting will be explored. Digital stories and photo essays will be used as an alternative learning style.
Transfer Credit: CSU

EDT 109
DEVELOPING CAMPUS-BASED PORTFOLIOS 1.0 UNIT
Class hours: 1.0 Lecture
This course covers the basic as well as advanced features of campus-based e-portfolio (electronic portfolio) systems. E-portfolios can be used as a repository to store and organize digital evidence of teaching and learning. The tools in the e-portfolio systems will be used to represent individual learning and competencies.
Transfer Credit: CSU

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 conferenced and on-line (virtual) curriculum projects for use in the classroom and on the World Wide Web. Students in this

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Announcement of Courses

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 50 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
EXPLORING 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, budgetary planning, and presentation skills will also be addressed.
Transfer Credit: CSU

EDT 123
INTERNET TOOLS FOR EDUCATORS 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 some of the tools provided on the Internet for educators including blogs, wikis, dictionaries, reference citation makers, libraries, and online rubric creators. Students will learn to use these tools, while discovering practical and creative uses to enhance their teaching. Methods of integrating the tools into the educational setting will be explored.
Transfer Credit: CSU

EDT 125
FUNDAMENTALS OF ONLINE TEACHING 2.0 UNITS
Class hours: 2.0 Lecture
Recommendation: EDT 50 or EDT 51, EDT 104, EDT 111, and EDT 52 or EDT 53 or equivalent with grades of Pass or "C" or higher. This course is designed for educators and future educators who wish to learn the fundamentals of teaching online courses. Students will learn online course structures and delivery methods.
Transfer Credit: CSU

EDT 132
USING AUDIO IN THE CLASSROOM 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 use of digital communication in education by creating and using digital music and other audio
recordings in the classroom using audio editing software. Using digital music and voice recordings, students will learn to do the following: create, perform, and record original music for digital movies, podcasts, and slideshows; capture streaming audio; create audio files for slideshows; and capture and assess oral readings.

Transfer Credit: CSU

EDT 137
IMOVIE/MOVIE
MAKER 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 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

EDT 171
SAKAI COURSE
MANAGEMENT SYSTEM 2.0 UNITS
Class hours: 2.0 Lecture
This course covers the use of Sakai, 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

ENERGY
(Science, Engineering, Math Division)

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). 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 (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

ENGINEERING
(Science, Engineering, Math Division)

ENGR 112
ENGINEERING GRAPHICS 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Recommendation: MATH 140 or equivalent with a grade of Pass or "C" or higher.
The principles of the graphic language of the engineer expressed through sketching and instrument drawings covering orthographic
projection, primary and secondary auxiliary views, dimensioning, and the working drawing. The descriptive geometry methods applied to points, lines, planes, intersections, warped surfaces, developments, and graphical mathematics. Required of all engineering students. Transfer Credit: CSU; UC

ENGR 123
DESCRIPTIVE GEOMETRY 3.0 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 (CAN ENGR 12)
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, resistance, capacitor and resistor coil circuits, and sinusoidal steady-state analysis and calculations. Transfer Credit: CSU; UC

ENGR 235 (CAN ENGR 8)
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
This course is a study of working drawings and blueprints used in engineering and manufacturing. Emphasis is placed on the ability to visualize and interpret typical drawings. Research is required into standards, specifications, procedures, bulletins, and techniques, which are a parallel part of the shop drawing system. It is intended to prepare the student for accurate interpretation of drawings in order to carry out the applications required or use them as appropriate engineering and manufacturing references. Transfer Credit: CSU

ENGR 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

ENGR 131
DESIGN FUNDAMENTALS INCLUDING AUTOCAD 3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This course stresses proper use of manual drafting instruments with an introduction to AutoCAD software for students who have had no high school or no industry experience on manual mechanical drafting. Manual drafting basic skills cover lettering text, geometric construction, isometric drawing, orthographic projection, dimensions, single auxiliary views, sectioning, and conventional practices. Transfer Credit: CSU

ENGT 133
SHEET METAL LAYOUT AND APPLICATIONS WITH INVENTOR 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 138 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This course will familiarize students with sheet metal layout involving triangulation, bend allowances for pattern development, and manufacturing processes for sheet metal. It will also include practical modern day applications in architecture, automotive, advertising displays and other areas affected by this technology. Transfer Credit: CSU

ENGT 138
AUTOCAD 4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: ENGT 131 or equivalent with a grade of Pass or "C" or higher, or appropriate work experience.
This course focuses on AutoCAD software for students with previous manual drafting knowledge. It includes drawing preparations in 2-D and 3-D, modify, blocks, and tools. It will prepare students to operate the systems and understand the applications of computer graphics utilizing industry standards. Students will learn to use an interactive computer graphics system to prepare drawings on personal computers. Drawings will be stored and retrieved from digital storage, enabling students to produce commercial quality copies using computer-driven plotter and printer. Transfer Credit: CSU

ENGT 139
ADVANCED APPLICATIONS OF COMPUTER AIDED DESIGN W/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 will assist 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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<tr>
<td>ENGT 153</td>
<td>MACHINE DESIGN WITH AUTOCAD</td>
<td>3.0</td>
<td>ENGT 138 or equivalent with a grade of Pass or &quot;C&quot; or higher, or appropriate work experience.</td>
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<td>ENGT 160</td>
<td>AUTODESK MAP 3-D</td>
<td>4.0</td>
<td>ENGT 138 or equivalent with a grade of Pass or &quot;C&quot; or higher, or appropriate work experience.</td>
<td>3.0 Lecture/3.0 Laboratory</td>
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<td>3.0</td>
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<td>4.0</td>
<td>ENGT 138 or equivalent with a grade of Pass or &quot;C&quot; or higher, or appropriate work experience.</td>
<td>3.0 Lecture/3.0 Laboratory</td>
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<tr>
<td>ENGT 265</td>
<td>CATIA I</td>
<td>4.0</td>
<td>ENGT 138 or equivalent with a grade of Pass or &quot;C&quot; or higher, or appropriate work experience.</td>
<td>3.0 Lecture/3.0 Laboratory</td>
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<td>ENGT 266</td>
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<td>4.0</td>
<td>ENGT 138 or equivalent with a grade of Pass or &quot;C&quot; or higher, or appropriate work experience.</td>
<td>3.0 Lecture/3.0 Laboratory</td>
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<td>ENGT 298</td>
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<td>1.0</td>
<td>ENGT 138 or equivalent with a grade of Pass or &quot;C&quot; or higher, or appropriate work experience.</td>
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All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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). 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 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. It develops writing fluency through written activities and assignments designed to teach and reinforce conventions to standard English.  This course focuses on sentence structure and development and sentence combining. Students will work toward developing short paragraphs. 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  
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' abilities 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.
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 writing process to develop expository prose with an emphasis on effective organization and on correctness. (It meets transfers 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

**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**  
**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 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 understanding of word origins, roots, and affixes, with particular attention to terms used in business and the professional disciplines. Class hours may be used to qualify a student for the certified shorthand reporters' examination.  
Transfer Credit: CSU

**ENGL 155**  
**TECHNICAL WRITING**  
3.0 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 221A**  
**LITERATURE IN THE BIBLE: HEBREW 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 is a general introduction to the literature composing the Hebrew Scriptures (more familiarly known as the Old Testament) in translation. Emphasis will be on understanding the Bible as a literary document through literary analysis, including the study of biblical genres such as history, poetry, narrative, drama, and homiletic, prophetic, apocalyptic and wisdom literature.  
Transfer Credit: CSU; UC

**ENGL 221B**  
**LITERATURE IN THE BIBLE: CHRISTIAN SCRIPTURES**  
3.0 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.  
All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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

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, the poem, the essay, and the song. 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 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 2 times. 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 in the special area of autobiography through journal writing and the development of a significant autobiography. Autobiographical works by important writers will be read for modeling purposes. Transfer Credit: CSU; UC

ENGL 230A  (CAN ENGL 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 232
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 233
READINGS IN THE NOVEL 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 course in the novel emphasizing structure, theme and style. Outstanding Continental, English and American novels are studied. Transfer Credit: CSU; UC
ENGL 234  
**READINGS IN SHORT FICTION**  
3.0 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 235  
**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 236  
**STUDIES 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 is a survey of literature by women reflecting women's changing roles and identities in society in various historical, political and cultural settings. Works studied are drawn from the genres of poetry, fiction, drama, essays and journals.  
*Transfer Credit: CSU; UC*

ENGL 237  
**ASIAN AMERICAN LITERATURE**  
3.0 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 238  
**CLASSIC ISLAMIC 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 Islamic literature in the English translation beginning with the pre-Islamic Arabian poetry of the sixth century and continuing through the thirteenth century. Emphasis is on understanding the literary character of the Qur'an and later Islamic literary works through an examination of literary forms, genres, movements, and themes.  
*Transfer Credit: CSU; UC*

ENGL 239  
**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 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 240  
**CREATIVE WRITING**  
(CAN ENGL 6)  
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 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 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  
**SURVEY OF ENGLISH LITERATURE**  
(CAN ENGL 8)  
(CAN ENGL SEQ B)  
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  
**SURVEY OF ENGLISH LITERATURE**  
(CAN ENGL 10)  
(CAN ENGL SEQ B)  
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. (Formerly ENGL 48/ENGL 48.1)  
*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). 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 (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

ENGLISH AS A SECOND LANGUAGE (Liberal Arts Division)

ESL 1 (Not Degree Applicable)
ESL GRAMMAR, READING, AND WRITING 1 5.0 UNITS
Class hours: 5.0 Lecture
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.

ESL 2 (Not Degree Applicable)
ESL GRAMMAR, READING, AND WRITING 2 5.0 UNITS
Class hours: 5.0 Lecture
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)
ESL GRAMMAR, READING, AND WRITING 3 5.0 UNITS
Class hours: 5.0 Lecture
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 7 (Not Degree Applicable)
ESL BEGINNING SPEAKING AND LISTENING 1.5 UNITS
Class hours: 1.5 Lecture
This course identifies and improves the production of American speech sounds. Students prepare, practice and present various oral messages. Emphasis is on stress and intonation. Topics center on students' needs and personal experiences. This course may be taken a maximum of 2 times. (Formerly ESL 22)

ESL 10 (Not Degree Applicable)
ESL SPEAKING AND LISTENING 1 3.0 UNITS
Class hours: 3.0 Lecture
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 READING 1 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
This course aids the students in reproducing the sounds of American English accurately. Attention focuses on the individual needs of the students. This course may be taken a maximum of 2 times.

ESL 14 (Not Degree Applicable)
PRONUNCIATION PLUS 3.0 UNITS
Class hours: 3.0 Lecture
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 intonational patterns of American English. Enunciation (production of sounds with clarity and precision) of American English in varying contexts will be stressed. Each student will be evaluated and assisted with his/her pronunciation difficulties. This course may be taken a maximum of 2 times.

ESL 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

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.

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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 20 (Not Degree Applicable)**  
**ESL SPEAKING AND LISTENING 2**  
**3.0 UNITS**  
**Class hours:** 3.0 Lecture  
**Recommendation:** ESL 10 or equivalent with a grade of Pass 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 21A (Not Degree Applicable)**  
**ESL INTERMEDIATE VOCABULARY**  
**3.0 UNITS**  
**Class hours:** 3.0 Lecture  
This course is for ESL students who wish to improve vocabulary skills. Emphasis is on building vocabulary, dictionary skills, and word recognition skills to be used in everyday language and college courses. Students will be introduced to the most frequently used English words and will also learn how to infer meaning from context.

**ESL 21B (Not Degree Applicable)**  
**ESL ADVANCED VOCABULARY**  
**3.0 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 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 a maximum of 2 times.

**ESL 31 (Not Degree Applicable)**  
**ESL READING 2**  
**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 32 (Not Degree Applicable)**  
**ESL LEARNING AMERICAN IDIOMS**  
**1.5 UNITS**  
**Class hours:** 1.5 Lecture  
Students study American expressions and American social customs. Students incorporate common expressions in their conversation and writing. Social customs, such as those regarding time, dress, guest behavior, gestures, and selected public encounters, are discussed.

**ESL 33 (Not Degree Applicable)**  
**ENGLISH FOR SPECIFIC PURPOSES**  
**1.5 UNITS**  
**Class hours:** 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 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 techniques. Emphasis is on methods for reading text books efficiently, taking notes, understanding textbook assignments, and preparing for examinations.

**ESL 35 (Not Degree Applicable)**  
**EDITING 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 a maximum of 4 times.

**ESL 36 (Not Degree Applicable)**  
**ESL GRAMMAR REVIEW**  
**0.5 UNIT**  
**Class hours:** 2.0 Laboratory  
This course is designed to assist any non-native speaker of English who is having difficulty writing grammatically correct papers for college and/or career purposes. It offers individual instruction for grammar structures, sentences formation, punctuation, and word usage when writing in English. This course focuses on correcting students' errors with verb tenses, noun usage, adjective clauses, noun clauses, determiners, gerunds and infinitives, sentence errors, syntax, and punctuation. This course may be taken a maximum of 4 times.

**ESL 100**  
**ESL ADVANCED WRITING AND GRAMMAR 1**  
**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 imitative and original essays. Written summaries are also included.  
**Transfer Credit:** CSU; UC*  
*UC credit limits may apply. Any or all of these ESL courses with #’s combined: maximum credit, 8 units.

**ESL 200**  
**ESL ADVANCED WRITING AND GRAMMAR 2**  
**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 100 or equivalent with a grade of Pass or "C" or higher.  
Students study the sentence in context. They learn to eliminate mechanical errors and faulty sentence structure from their writing. Students review grammatical structures and punctuation. They write original paragraphs based on personal experience and on ideas drawn from supplemental materials.  
**Transfer Credit:** CSU; UC*  
*UC credit limits may apply. Any or all of these ESL courses with #’s combined: maximum credit, 8 units.

**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

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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). 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 (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

ENVIRONMENTAL POLICY
(Science, Engineering, Math Division)

ENVS 200
ENVIRONMENTAL POLICY 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: BIOL 105 or GEOG 103 or equivalent with a grade of Pass or "C" or higher.
This course presents the history, current status, and future of environmental issues, with special emphasis on California. The biological, geological, and geographical aspects of water quality, air quality, energy, land use, and the coastal environment will be examined, as well as the policies used to manage them. The course requires one field trip.
Transfer Credit: CSU; UC

FINANCE
(Business Education Division)

FIN 50
ELECTRONIC CALCULATORS/BUSINESS APPLICATIONS 3.0 UNITS
Class hours: 3.0 Lecture
This course is designed to teach students how to properly operate electronic calculators. Students will learn how electronic display calculators work, how to properly enter data using the ten-key keyboard, and how electronic calculators are used in business to solve practical problems. Techniques learned in this class can be applied to data processing and accounting classes. (Formerly BUSF 50)

FIN 51
RETIREMENT PLANNING AND INVESTING 1.5 UNITS
Class hours: 1.5 Lecture
This course introduces methods of computing amounts to be saved and invested in order to fund retirement. The course also discusses various retirement plans available. Additionally, students will learn techniques to research and evaluate mutual fund investment opportunities. (Formerly BUSF 51)

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 8)  (CAN FREN SEQ 8)  
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 8)  
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; UC

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 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). 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 101  (CAN GEOG 2)  
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

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GEOG 102  (CAN GEOG 4)
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 (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 (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 201  (CAN GEOL 4)
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
Recommendation: ENGL 100 clearance and MATH 40 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.

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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 activities.

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

**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).
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

**GERMAN**
(Liberal Arts Division)

**GERM 101** (CAN GERM 2) (CAN GERM SEQ A)
**ELEMENTARY GERMAN** 5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
This beginning course emphasizes listening, speaking, reading, and writing, and helps to develop an appreciation of cultural diversity through the study of differences and similarities between cultures.
Transfer Credit: CSU; UC

**GERM 102** (CAN GERM 4) (CAN GERM SEQ A)
**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 consists of selected intermediate readings of literary and technical German designed to meet requirements of students majoring in literature, science, mathematics and engineering.
Transfer Credit: CSU; UC

**GERM 202** (CAN GERM 10) (CAN GERM SEQ B)
**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 in-depth study of grammatical concepts and reading and interpretation of literary works by writers of German-speaking countries. Guided and original compositions are included. This class, conducted primarily in German, will further develop the appreciation of cultural diversity.
Transfer Credit: CSU; UC

**GERM 203**
**SCIENTIFIC GERMAN** 4.0 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

**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

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**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 283**
**ADVANCED**
**CONVERSATIONAL GERMAN**  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: GERM 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 the acquisition of appropriate vocabulary and language patterns, and the creative development of arguments. This course, conducted in German, is recommended for all German majors.
*Transfer Credit: CSU; UC*

**GERM 291**
**GERMAN FOR**
**INTERNATIONAL COMMERCE**  3.0 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 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). 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 (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*

**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*

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

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 (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 (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 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: 3.0 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, and the proper utilization of emergency medical equipment. The information presented will assist in the development of critical thinking skills required to complete a systematic and nationally standardized approach to caring for the ill and injured patient. Successful candidates in HO 9 and HO 9L will be eligible for verification of course completion. The combination of HO 9 and HO 9L meets the didactic, certifying skills exam, and clinical experiences set forth in the California Code of Regulations for Emergency Medical Technician hours of instruction. Additional testing and certification process is required to use the name Emergency Medical Technician - I or Basic. This course may be taken for 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 HO 9L will be eligible for verification of course completion. The combination of HO 9 and HO 9L meets the didactic, certifying skills exam, and clinical experiences set forth in the California Code of Regulations for Emergency Medical Technician hours of instruction. Additional testing and certification process is required to use the name Emergency Medical Technician - I 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.

HO 53 ELECTROCARDIOGRAPHY 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 electrocardiography. This course follows the guidelines set forth by both state and national regulations.

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Announcement of Courses

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 1.5 UNITS
Class hours: 1.0 Lecture/1.5 Laboratory
Recommendation: MA 161 or equivalent with a grade of Pass or "C" or higher.
This class provides instruction in the principles and practices of blood specimen collection required by the health care regulations in California. Completion of the course meets the following requirements: 1) complete didactic and partial practical to qualify for the examination for Certified Phlebotomy Technician I as defined by the Department of Health Services; 2) complete didactic and partial practical for Medical Assistant certification as defined by the California Society of Medical Assistants.

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/CPA AND FIRST AID 1.5 UNITS
Class hours: 1.5 Lecture
This course for allied health students will cover cardiopulmonary resuscitation and first aid. Topics will include one-and-two person CPR for infants, children, and adults; resuscitation will mask and bag-valve mask; automated external defibrillator (AED); and early intervention for wounds, burns, trauma, and sudden illness. A two-person CPR/AED card and a First Aid card 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
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 discuss common of 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). 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

HO 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.

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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 (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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**Announcement of Courses**

**HISTORY**

*(Humanities, Social Sciences Division)*

**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 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 course is a study of United States history tracing the development of American ideals and actions from the Pre-Revolutionary Period through the Civil War Era. Major political, social, economic, and cultural factors will be presented focusing on the roles played by the diverse peoples and cultures who shared in the development of United States history. An emphasis may be placed on one or more of these factors. (Formerly HIST 201)  
*Transfer Credit: CSU; UC*

**HIST 102**  
**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.  
Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 with a grade of Pass or "C" or higher.

This course is an historical examination of the cultural, political, and economic forces that have shaped contemporary California. It focuses on the roles played by the diverse people who shared in its development from early Native American societies through the Spanish and Mexican periods and U.S. conquest to the present.  
*Transfer Credit: CSU; UC*

**HIST 103**  
**AFRICAN/AMERICAN HISTORY 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 an historical examination of the cultural, political, and economic forces that have shaped contemporary California. It focuses on the roles played by the diverse people who shared in its development from early Native American societies through the Spanish and Mexican periods and U.S. conquest to the present.  
*Transfer Credit: CSU; UC*

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**HIST 120**  
**HISTORY OF CALIFORNIA 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 43 with a grade of Pass or "C" or higher.

This course is an historical examination of the cultural, political, and economic forces that have shaped contemporary California. It focuses on the roles played by the diverse people who shared in its development from early Native American societies through the Spanish and Mexican periods and U.S. conquest to the present.  
*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.

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 WS 204.  
*Transfer Credit: CSU; UC*

**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 English Placement Process or ENGL 52 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: 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 READ 54 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 READ 54 with a grade of Pass or "C" or higher.

This course is a study of the histories of the United States, Canada, and the nations of Latin America from the completion of the independence movements to the present. They are studied as an integrated whole focusing on the roles played by the diverse peoples and cultures who shaped their development. Major political, economic, social and cultural factors and issues are presented with emphasis given to emerging international relations within the Western Hemisphere during the nineteenth and twentieth centuries.

Transfer Credit: CSU; UC

**HIST 230**

**HISTORY OF MEXICO**  **3.0 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 examination of the origins and development of civilizations in Mexico 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 READ 54 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. Major political, economic, social and cultural factors and issues are presented.

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.

Recommendation: Satisfactory completion of the Reading Placement Process or READ 54 or equivalent with a grade of Pass or "C" or higher.

History 242 is a survey course in the history of modern Europe and the Western world from the mid-seventeenth century to the present. It emphasizes broad economic, social and changing political trends, with special attention given to the role of science, the arts and technology in creating the modern world.

Transfer Credit: CSU; UC

**HIST 245**

**WORLD CIVILIZATION FROM ANTIQUITY TO 1500**  **3.0 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
Announcement of Courses

histories and global interactions. The root and development of civilizations in Africa, the Americas, Asia, and Europe from the 1500's to the present day will be chronicled. Topics will include: the origins and the role of universal religions; the examination of political, social, and gender structures in relation to economic and demographic development; and the diffusion of culture and technology via migration, commerce and the expanse of empire.

Transfer Credit: CSU; UC

HIST 250
HISTORY OF ENGLAND, GREAT BRITAIN AND THE COMMONWEALTH 3.0 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; UC

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). 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 (2 units for 108 hours).

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Transfer Credit: CSU

**HUMANITIES**

(Fine Arts/Communications 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

**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). 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 (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

**INSURANCE**

(Business Education Division)

**INSR 101**  
**INTRODUCTION TO INSURANCE**  
1.0 UNIT

Class hours: 1.0 Lecture  
This course gives students a background of the modern property/casualty insurance system, how insurance products and services are distributed to the consumer, how insurance company departments function, how reinsurance is used to create an insurance company and insure large property and high liability values/limits, an understanding of civil laws or tort and contract, a review of the basic commercial and personal Insurance Services Office (ISO) insurance contracts, and an understanding of the importance of the risk management process.

Transfer Credit: CSU

**INSR 102**  
**INSURANCE CODE AND ETHICS**  
1.0 UNIT

Class hours: 1.0 Lecture  
This Code and Ethics course is designed for insurance majors. It addresses ethical considerations one must support in order to succeed in business, specifically in the insurance industry. This course presents ethical issues with which employees working in insurance offices will be involved.

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

INSR 171
INSURANCE OCCUPATIONAL WORK EXPERIENCE 1.0 UNIT
Class hours: 1.0 Work Experience
Corequisite: 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 Sciences 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 reintegrate 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
This course provides an overview of special populations with mental illness, including the homeless, transitional age youth, the elderly, veterans, gays, lesbians, bisexuals, transsexuals, individuals with physical disabilities, individuals with substance abuse, and different racial and ethnic groups. Emphasis is placed on the issues that are specific to special populations with mental illness, including living skills, education, self-development, empowerment, leadership, transitional support, and recovery efficacy. (Formerly PSYC 272)

Transfer Credit: CSU

JAPANESE
(Liberal Arts Division)

JAPN 101
ELEMENTARY JAPANESE 5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
Prerequisite: JAPN 102 or equivalent with a grade of Pass or "C" or higher.

This beginning Japanese course emphasizes listening, reading, writing, and speaking and helps to develop the appreciation of cultural diversity through the study of differences and similarities between cultures.

Transfer Credit: CSU; UC

JAPN 102
ELEMENTARY JAPANESE 5.0 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 course continues to emphasize listening, reading, writing, and speaking and helps to continue to develop the appreciation of cultural diversity through the study of differences and similarities between cultures.

Transfer Credit: CSU; UC

JAPN 201
INTERMEDIATE JAPANESE 5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
Prerequisite: JAPN 102 or equivalent with a grade of Pass or "C" or higher.

This course provides a review and in-depth study of Japanese grammatical concepts. Reading and interpretation of literary works by Japanese writers and guided and original compositions are included. This course will further develop the appreciation of cultural diversity. This class is primarily conducted in Japanese.

Transfer Credit: CSU; UC
JAPN 202
INTERMEDIATE JAPANESE 4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: JAPN 201 or equivalent with a grade of Pass or "C" or higher.
This is a course with emphasis on reading modern Japanese. It continues the review of grammatical concepts, and requires written composition and oral discussion. This course, conducted primarily in Japanese, completes the study of all aspects of the Japanese language at the intermediate level.
Transfer Credit: CSU; UC

JAPN 281
BEGINNING
CONVERSATIONAL JAPANESE 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: JAPN 102 or equivalent with a grade of Pass or "C" or higher.
This course gives the student practice in speaking and understanding Japanese 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 Japanese. This course develops the appreciation of the Japanese culture. It is recommended for all Japanese majors.
Transfer Credit: CSU; UC

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 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 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.

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). 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

JAPN 299
DIRECTED STUDIES 2.0 UNITS
Class hours: 0.0 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 (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.
JOUR 103
NEWSPAPER
ARTICLE WRITING 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Recommendation: 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. Student research, write, and edit articles for the school paper as they practice the skills of gathering information from a variety of sources, synthesizing a story and preparing it for dissemination to others. Ethics and legal aspects of communication are also covered. This course may be taken a maximum of 4 times. Credit/No Credit option available for non-journalism majors.
Transfer Credit: CSU

JOUR 105
NEWSPAPER PRODUCTION 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Recommendation: 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 artists, cartoonists and photographers. This course may be taken a maximum of 4 times. Credit/No Credit option available for non-journalism majors.
Transfer Credit: CSU

JOUR 106
TALONMARKS.COM 1.0 UNIT
Class hours: 0.5 Lecture/2.0 Laboratory
Recommendation: JOUR 101 and ENGL 52 or equivalent with grades of Pass or "C" or higher, or concurrent enrollment. JOUR 103 or equivalent with grades of Pass or "C" or higher, or concurrent enrollment.
This course focuses on media article writing and digital storytelling using the online school newspaper, talonmarks.com, as a practical laboratory. Students research, write, and edit articles for the online school newspaper using multimedia techniques, such as photo slideshows, videos, animations, Flash-based presentations, and podcasts. Students research stories, synthesize and edit them, and prepare them for dissemination. Ethical and legal aspects of communication are also covered. This course may be taken a maximum of 4 times.
Transfer Credit: USC

JOUR 111
INTRODUCTION TO NEWSLETTERS 1.0 UNIT
Class hours: 0.5 Lecture/2.0 Laboratory
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 next step: newsletter design.
Transfer Credit: CSU

JOUR 112
COPY EDITING SKILLS 1.0 UNIT
Class hours: 0.5 Lecture/2.0 Laboratory
Recommendation: Concurrent enrollment or completion of JOUR 101 with a grade of Pass or "C" or higher.
This course focuses on copy editing and word skills for journalists. Students will practice applying Associated Press style rules to stories and improving sentence structure, spelling, and general grammar skills commonly found in news stories. This course is recommended for journalism students who wish to improve copy editing skills. Skills acquired will be useable in various job markets, including newsletter, newspaper, magazine, book, and online publishing.
Transfer Credit: CSU

JOUR 119
LEGAL ASPECTS OF MASS COMMUNICATIONS 1.0 UNIT
Class hours: 1.0 Lecture
This course provides a brief introduction to legal aspects faced by those involved in mass media and new media. Major topics include First Amendment rights and responsibilities, libel, privacy, copyright, freedom of information, open meetings, broadcast decency, and student media. This course in not open to students who are enrolled in or who have received credit in LAW 119 or RTV 119.
Transfer Credit: USC

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 TH 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.

Class hours: 3.0 Lecture
Transfer Credit: CSU

**JOUR 157**
**PRINCIPLES OF PUBLIC RELATIONS 3.0 UNITS**

This course 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.

Class hours: 3.0 Lecture
Transfer Credit: CSU

**JOUR 160**
**COLLEGE MAGAZINE PRODUCTION 1.0 UNIT**

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 in feature articles using, page design, and writing skills. This course may be taken a maximum of 4 times. (Formerly JOUR 160L)

Class hours: 0.5 Lecture/2.0 Laboratory
Transfer Credit: CSU

**JOUR 170**
**BROADCAST NEWS/WEBCASTING 1.0 UNIT**

This course focuses on broadcast newwriting 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. News gathering 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.

Class hours: 0.5 Lecture/2.0 Laboratory
Transfer Credit: CSU

**JOUR 171**
**OCCUPATIONAL WORK EXPERIENCE IN JOURNALISM 1.0 UNIT**

This course offers study and practical experience in planning and executing projects related to journalism. 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.

Class hours: 1 lecture
Prerequisite: JOUR 101 or equivalent with a grade of Credit or "C" or higher.

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.

Class hours: 6.0 Independent Study
Transfer Credit: CSU

**JOUR 298**
**DIRECTED STUDIES 1.0 UNIT**

This course focuses on broadcast newwriting 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. News gathering 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.

Class hours: 0.5 Lecture/2.0 Laboratory
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 (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**

(Not Degree Applicable)

**LAW 1T**

Class hours: 1.0 Laboratory
Open Entry/Open Exit

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 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 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
Recommendation: Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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
Recommendation: LAW 56 or BCOT 108 or equivalent with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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
Recommendation: LAW 56 and enrollment in LAW 1T.
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, transparency 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 on 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). This course may be taken a maximum of 2 times. (Formerly BL 98)

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 learning agreement describing the purposes and outcomes of the project. Students should expect to meet with the supervising faculty member on two hours each week for conferences. Credit is based upon the number of hours in the semester expected to complete the project (2 units for 108 hours). This course may be taken a maximum of 2 times. (Formerly BL 99)

LAW 100
INTRODUCTION TO CALIFORNIA CIVIL PROCEDURES 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
This course is an introduction to civil procedures in litigation, including pre-suit claims and notices, jurisdiction, service of process, venue, statutes of limitations, parties, and joinder. Rules governing pleading in complaints and answers are covered, as well as demurrers and amended pleadings. Computerized legal forms are introduced. (Formerly BL 100)
Transfer Credit: CSU

LAW 101
INTRODUCTION TO LAW 3.0 UNITS
Class hours: 3.0 Lecture
This course is an introduction to careers in the legal field including the role of the paralegal/legal assistant in the law office and the rules of ethics which govern lawyers and legal assistants. The course also covers substantive law in the areas of crimes and torts and describes the structure of the legal system in the federal and state settings. An introduction to the law library and legal resources is provided. (Formerly BL 101)
Transfer Credit: CSU

LAW 102
ADVANCED CALIFORNIA CIVIL PROCEDURES 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: LAW 100 with a grade of Pass or "C" or higher.
Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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 basic techniques of legal research. Emphasis will be placed upon techniques of modern legal research which include the use

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of the law library and the specific techniques of how to use the primary and secondary sources of the law, legal terms, research aids; and introduction to legal writing. Primary emphasis will be on the legal research in the state of California. (Formerly BL 103)
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 for the paralegal student. This course will utilize legal research skills to develop sophisticated techniques in the use of legal research materials both at the state and federal levels. Computerized legal research (Westlaw) and traditional research methods will be utilized in preparing complex legal research projects. Analysis of the law through practical application of legal research will be developed. Memorandums, points and authorities, and comprehensive briefs will be required. (Formerly BL 104)
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
Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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
Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
This course acquaints the student with 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
Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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

LAW 109
TORTS & PERSONAL INJURY  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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 everyday business transactions. It will include discussions of legal rights, contracts, Universal Commercial Code (UCC) sales, negotiable instruments, and the structure of our judicial system. This course meets 54 hours of the legal requirement for Court Reporting Certification. (Formerly BL 110)
Transfer Credit: CSU; UC*
*UC credit limits may apply. LAW 110, LAW 111 and BA 113 combined: maximum credit, one course.

LAW 111
BUSINESS LAW  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, Universal Commercial Code (UCC) sales, negotiable instruments, and the structure of our judicial system. This course meets 54 hours of the legal requirement for Court Reporting Certification. (Formerly BL 111)
Transfer Credit: CSU; UC*
*UC credit limits may apply. LAW 110, LAW 111 and BA 113 combined: maximum credit, one course.

LAW 112
ESTATE PLANNING FOR THE PARALEGAL  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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
Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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 116)
Transfer Credit: CSU

LAW 114
LAW ON THE INTERNET  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Students in Paralegal courses are strongly recommended to enroll in LAW 1T.

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
Recommendation: Students in Paralegal courses are strongly recommended to enroll in LAW 1T.

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
Recommendation: Students in Paralegal courses are strongly recommended to enroll in LAW 1T.

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 119
LEGAL ASPECTS OF MASS COMMUNICATIONS  1.0 UNIT
Class hours: 1.0 Lecture
This course provides a brief introduction to legal aspects faced by those involved in mass media and new media. Major topics include First Amendment rights and responsibilities, libel, privacy, copyright, freedom of information, open meetings, broadcast decency, and student media. This course is not open to students who are enrolled in or who have received credit in JOUR 119 or RTV 119.
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 BL 161)
Transfer Credit: CSU

LAW 171
LEGAL OCCUPATIONAL WORK EXPERIENCE  1.0 UNIT
Class hours: 1.0 Work Experience
Corequisite: 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 172
LEGAL OCCUPATIONAL WORK EXPERIENCE  2.0 UNITS
Class hours: 1.0 Work Experience
Corequisite: 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: 1.0 Work Experience
Three units of Legal Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester.
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college, and the employer/trainers.
First semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site.
Second, third, and fourth semester students must complete the project (1 unit for 54 hours). Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 4 times. (Formerly BL 174) Transfer Credit: CSU

LAW 174
LEGAL OCCUPATIONAL WORK EXPERIENCE  4.0 UNITS
Class hours: 1.0 Work Experience Corequisite: 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 complete the project (1 unit for 54 hours). Second, third, and fourth semester students must secure departmental approval before enrolling. Students will meet weekly with the instructor until their participatory assignments and semester work projects have been approved. This course may be taken a maximum of 4 times. (Formerly BL 174) Transfer Credit: CSU

LAW 220
LANDLORD AND TENANT LAW  3.0 UNITS
Class hours: 3.0 Lecture Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
This is an introduction to landlord and tenant law including the nature of the tenancy relationship, rental agreements, rights and obligations during tenancy, premises liability and unlawful detainer litigation. Rules governing preparation of the unlawful detainer summons and complaint and answer are covered as well as obtaining default judgment and possession of property. (Formerly BL 220) Transfer Credit: CSU

LAW 230
CORPORATE LAW  3.0 UNITS
Class hours: 3.0 Lecture Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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 Recommendation: LAW 56 with a grade of Pass or "C" or higher. Students in Paralegal courses are strongly recommended to enroll in LAW 1T.
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

LAW 290
CAPSTONE COURSE-PARALEGAL PROGRAM  1.0 UNIT
Class hours: 1.0 Lecture Recommendation: To be taken in the final semester of course work for certificate students, and to be taken in the final semester prior to graduation for Paralegal A.A. degree students.
This course provides the opportunity for students to apply skills and knowledge learned in the other paralegal courses to evidence their mastering of the program outcomes for the Paralegal Program. The aim of the course is to assess students to confirm that they have achieved the learning outcomes for the program, to improve job-readiness, and to have them prepare a portfolio project. 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 pass/no pass 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).
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

**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 (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 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 Machinist's Handbook. Particular emphasis will be placed upon solving problems of ratio and proportion, measurement system conversion, plane geometry, and right triangles as applied to machine fabricated parts.

**MTT 51**
**MASTERCAM MILLING** 3.5 UNITS
Class hours: 3.0 Lecture/1.5 Laboratory
This course will prepare students to operate the MasterCAM Programming Systems for milling machines. Students will learn to create and import Computer Aided Design (CAD) geometry, create proper job plans, devise proper toolpaths, and input the resultant data into virtual Computer Numerical Control (CNC) milling machines.

**MTT 52**
**SETUP AND OPERATION OF CNC MILLING MACHINES** 2.5 UNITS
Class hours: 2.0 Lecture/1.5 Laboratory
This course instructs students in the safe and accurate setup and production operation of Computer Numerical Control (CNC) milling machines. 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 give the students 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 55**
**CNC SHOP INSPECTION** 2.0 UNITS
Class hours: 2.0 Lecture
This course is designed to give the students 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 56**
**SETUP AND OPERATION OF CNC LATHE** 2.5 UNITS
Class hours: 2.0 Lecture/1.5 Laboratory
This course will instruct students in safe and accurate setup and production operation of Computer Numerical Control (CNC) lathes. Students will learn how to load programs, select offset, select cutter radius compensation, and run first article parts.

**MTT 57**
**FIXTURE TOOLING** 2.0 UNITS
Class hours: 2.0 Lecture
This course teaches planning, design, and fabrication methods for fixtureing in the machine shop. It includes decision-making, machine planning, cutter selection, tolerancing, rest areas, clamping, blueprint interpretation, and design.

**MTT 58**
**COMPUTER-ASSISTED INSPECTION USING VERISURF** 3.5 UNITS
Class hours: 3.0 Lecture/1.5 Laboratory
Prerequisite: MTT 56 or concurrent enrollment with a grade of Pass or "C" or higher
This course advances the student's skill in the development of inspection methods for complex machined parts using Verisurf software. The student will learn the advanced aspects of dimensional metrology by using articulating arms, 3D scanners, and mechanical as well as programmable coordinate measuring machines to validate part geometry. Machine-specific software, such as PC-DMIS and FARO Gage, will also be introduced. Finally, the student will develop skills in preparing production part approval processes (PPAP).

**MTT 59**
**MASTERCAM TURNING** 2.5 UNITS
Class hours: 2.0 Lecture/1.5 Laboratory
This course is designed to teach 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 60**
**ADVANCED MACHINE TOOL CONCEPTS** 2.0 UNITS
Class hours: 2.0 Lecture
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**
**GIBBS CAM MILLING** 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
This course prepares students to operate the GibbsCam Programming System for milling machines. Students will learn to create and import Computer Aided Design (CAD) geometry, create proper job plans, devise proper toolpaths, and input the resultant data into virtual CNC machinery.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
MTT 77
GIBBS CAM TURNING 2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
This course prepares students to operate the GibbsCam Programming System for lathes. Students will learn how to create and import Computer Aided Design (CAD) geometry, create proper job plans, devise proper toolpaths, and input the resultant data into virtual Computer Numerical Control (CNC) machinery. Toolpaths will include facing, turning, grooving, threading, boring, and parting off.

MTT 91L (Not Degree Applicable)
CNC MILL MACHINING LABORATORY 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: MTT 51 or MTT 76 and MTT 52, with grades of Pass or "C" or higher.
Corequisite: MTT 56 with a grade of Pass of "C" or higher, or prior completion
This course is designed to further develop specialized Computer Numerical Control (CNC) Milling Machine skills using Computer Assisted Manufacturing (CAM) software on a semi-autonomous basis. The student will receive instructions and blueprints from the instructor and work on those projects individually. The student will plan the work, select the programming method given the tolerances of the part, select the fixture, tools, and run a first article on a CNC Mill. This course may be taken a maximum of 4 times. (Formerly MTT 1L)

MTT 92L (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 students' skills and output in areas of their choice. This course may be taken a maximum of 3 times. (Formerly MTT 2L)

MTT 93L (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 students' skills and output in areas of their choice. This course may be taken a maximum of 3 times. (Formerly MTT 3L)

MTT 94L
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. (Formerly MTT 4L)

MTT 95L
CNC LATHE MACHINING LABORATORY 1.0 UNIT
Class hours: 3.0 Laboratory
Prerequisite: MTT 57 and MTT 59 or MTT 77 with grades of Pass or "C" or higher.
Corequisite: MTT 56 with a grade of Pass or "C" or higher, or prior completion
This course is designed to further develop specialized Computer Numerical Control (CNC) turning machine skills using Computer-Assisted Manufacturing (CAM) software on a semi-autonomous basis. The student will receive instructions and blueprints from the instructor and work on those projects individually. The student will plan the work, select the programming method given the tolerances of the part, select the fixture, tools, and run a first article on a CNC lathe. This course may be taken a maximum of 3 times.

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). 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 (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: 2.0 Lecture
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 sawing and cutoff machines. This course will incorporate calculation, setup, and architecture of speeds and feeds, and measurements. This course is required for all Machine Tool Technology majors.
Transfer Credit: CSU

MTT 170
COMPUTER NUMERICAL CONTROL PROGRAMMING 2.0 UNITS
Class hours: 2.0 Lecture
This course includes numerical control programming as applied to machine tools. Students will develop programs for complex multi-turret, multi-axis machines. This course is required for all Machine Tool Technology majors. This course may be taken a maximum of 2 times.

MTT 177
ADVANCED GIBBS 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 advances the student’s skill in the development of 3D surface models, solids, and toolpaths using GibbsCam. Students learn how to create programs to machine parts using four-and five-axis machinery. Students will also learn to create optimal programs for complex multi-turret, multi-axis machines.
spindel, and multi-tasking machine tools. Other topics include programming multiple parts on tombstones. 

*Transfer Credit: CSU*

**MFT 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 toolpaths using MasterCAM. Students learn to create swept, ruled, revolved, Coons, draft, trimmed, and lofted surfaces using parametric and NURBS methodology. Basic and advanced solids modeling is fully incorporated into this class. Modification of geometry/toolpath using parametric hooks will be emphasized.

*Transfer Credit: CSU*

**MANUFACTURING TECHNOLOGY**

(Technology Division)

**MFT 43**  
**(Not Degree Applicable)**

**MFT 50**  
**HAZ-MAT**  
**1.5 UNITS**

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.

**MFT 51**  
**INTRODUCTION TO COMPUTER INTEGRATED MANUFACTURING (CIM)**  
**3.0 UNITS**

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.

**MFT 52**  
**INTRODUCTION TO LASER CUTTING TECHNOLOGY**  
**2.0 UNITS**

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 visits to industry sites are included.

**MFT 53**  
**STATISTICAL PROCESS CONTROL**  
**1.5 UNITS**

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 controls, and risk charts, and process capability studies.

**MFT 54**  
**ULTRASONIC LEVEL I TESTING**  
**1.5 UNITS**

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.

**MFT 55**  
**QUALITY CONTROL (QC)**  
**1.5 UNITS**

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  
**1.5 UNITS**  
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)  
**1.5 UNITS**  
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**  
LEAN SIGMA  
**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)  
**MATH 20**  
(Not Degree Applicable)  
**MATH 40**  
(Not Degree Applicable)
Coordinate system, problem solving techniques, signed numbers, simplifying and evaluating expressions and formulas, solving simple equations, numerical relationships involving lines, angles and polygons.

**MATH 60**  
**ELEMENARY ALGEBRA**  
4.0 UNITS  
Class hours: 4.0 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 designed for students with a deficiency in high school algebra. Topics included are: real numbers, polynomials, rational expressions, first-degree equations and inequalities, graphs of equations, linear systems of equations, exponents and radicals, and quadratic equations.

**MATH 70**  
**PLANE GEOMETRY**  
4.0 UNITS  
Class hours: 4.0 Lecture  
Prerequisite: MATH 60 or equivalent with a grade of Pass or "C" or higher or satisfactory score on Intermediate Algebra Readiness Test.  
This course includes the study of triangles, quadrilaterals, circles, parallels, and similar figures. Skill development involving equalities, proportions, and areas of the above figures is included. Logical thinking is stressed in problem solutions. This course is designed for students who have not taken high school plane geometry.

**MATH 80**  
**INTERMEDIATE ALGEBRA**  
4.0 UNITS  
Class hours: 4.0 Lecture  
Prerequisite: MATH 60 or equivalent with a grade of Pass or "C" or higher or satisfactory completion of the Math Placement Process.  
This course explores the representation of functions and relations as graphs, formulas, and tables. The types of functions studied will include linear, quadratic, polynomial, rational, exponential, and logarithmic. These functions will be used in solving a variety of equations, systems of equations and application problems. Other topics include: the algebra of real and complex numbers, inequalities, and an introduction to conic sections. (This course is not open to students with credit in MATH 80A or MATH 80B)

**MATH 80A**  
**INTERMEDIATE ALGEBRA I**  
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.  
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, exponential 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 tutoring techniques, tutor ethics, principles of tutoring, appropriate tutoring techniques, and a discussion of common mathematical structures found in lower division mathematics courses. This course is offered on a credit/no credit basis only. This course may be taken a maximum of 2 times.

**MATH 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 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. Students who have not taken MATH 80 or MATH 80B must attain satisfactory score on the Advanced Math Readiness Test.  
This is a nontechnical course surveying a variety of concepts in mathematics. Topics will include: elementary logic, algebra of sets, rational and real numbers, informal geometry, elementary combinatorics and probability, and elementary statistics. It is not open to student with credit in any transfer level math course.  
Transfer Credit: CSU; UC

**MATH 105**  
**ACTIVITY-BASED PROBABILITY AND STATISTICS FOR ELEMENTARY AND MIDDLE SCHOOL TEACHERS**  
3.0 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,
MATH 110A  (CAN MATH 4)
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. Students who have not taken MATH 80 or MATH 80B must attain a satisfactory score on the Advanced Math Readiness Test.
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  (CAN MATH 12)
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 patternning, informal geometry, congruence similarity, constructions, transformations, tessellations, and measurement involving both English and Metric units in 1, 2, and 3 dimensions. Computer explorations will be integrated into the course. The course will also emphasize hands-on modeling of real-world geometric situations. It meets elementary education credential requirements. It is not open for credit to math majors.
Transfer Credit: CSU; UC*
*UC credit limits may apply. MATH 110A and MATH 110B combined: maximum credit, one course.

MATH 112  (CAN STAT 2)
ELEMENTARY STATISTICS  4.0 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*
*UC credit limits may apply. MATH 112 combined with PSYC 210: maximum credit, one course.

MATH 114  (CAN MATH 8)
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*
*UC credit limits may apply. MATH 114 and MATH 150 combined: maximum credit, one course.

MATH 115  (CAN MATH 16)
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 circular functions, inverses, graphs, angles and trigonometric functions, solutions of right and oblique triangles, identities, solution of equations, and complex numbers. This course may be taken in Programmed Learning Sections. See your counselor for details.
Transfer Credit: CSU

MATH 116  (CAN MATH 34)
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 course does not meet the prerequisite for Mathematics 190.
Transfer Credit: CSU; UC*
*UC credit limits may apply. MATH 116 and MATH 170 combined: maximum credit, one course.

MATH 140  (CAN MATH 10)
TRIGONOMETRY  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. Students who have not taken MATH 80 or MATH 80B must attain a satisfactory score on the Advanced Math Readiness Test.
This course includes circular functions, inverses, graphs, angles and trigonometric functions, solutions of right and oblique triangles, identities, solution of equations, and complex numbers. This course may be taken in Programmed Learning Sections. See your counselor for details.
Transfer Credit: CSU

MATH 150  (CAN MATH 15)
PRECALCULUS MATH  4.0 UNITS
Class hours: 4.0 Lecture
Prerequisite: MATH 140 or equivalent with a grade of Pass or "C" or higher. Entering students must attain a satisfactory score on the Calculus Readiness Test.
This course is a critical study of the algebra of real and complex numbers which includes selected topics such as the number system, inequalities, and the binomial theorem, sets, matrices, sequences and series. Exponential, logarithmic, polynomial and inverse functions are included.
Transfer Credit: CSU; UC*
*UC credit limits may apply. MATH 114 and MATH 150 combined: maximum credit, one course.
### Announcement of Courses

#### 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, or concurrent enrollment.  
This course is an introduction to modern mathematical software commonly used in universities and industry. The topics will be specifically selected to enhance Math 150 Precalculus Mathematics course using the powerful numeric, symbolic, and graphical capabilities of the mathematical software and will better prepare students for calculus.  
Transfer Credit: CSU

#### MATH 170  
**(CAN MATH 18)**  
**(CAN MATH SEQ B)**  
**(CAN MATH SEQ C)**  
**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 included are differentiation and integration of algebraic, and trigonometric functions with applications. The necessary topics of analytic geometry are presented as needed to proceed with the principles of calculus.  
Transfer Credit: CSU; UC*  
*UC credit limits may apply. 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  
**(CAN MATH 20)**  
**(CAN MATH SEQ B)**  
**(CAN MATH SEQ C)**  
**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

#### 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 or concurrent enrollment.  
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

#### 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). 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 (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.*
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.

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, HO 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 69
**MEDICAL ASSISTANT OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS**
Class hours: 1.0 Work Experience
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: MA 66 and MA 67 or prior completion with a grade of Pass or "C" or higher.
One (1) hour control class each week plus 15 hours of employment per week. The employment must in a job related to the student’s educational goal. 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 70
**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). This course may be taken a maximum of 2 times.

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320
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 (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, Math Division)

MICR 200 (CAN BIOL 14)
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). 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 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 (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

MUSIC
(Fine Arts/Communications Division)

MUS 2 (Not Degree Applicable)
COMMERCIAL MUSIC ORIENTATION 1.0 UNIT
Class hours: 1.0 Lecture/2.0 Laboratory
This course provides preparation for professional and semi-professional work as a commercial musician. It includes preparation for auditions, techniques in securing employment, basic knowledge required for practicing musicians, conduct and deportment on the job, how to improve one’s skills and correcting weaknesses in an individual’s qualifications as a practicing professional or semi-professional.

MUS 100
MUSIC APPRECIATION 3.0 UNITS
Class hours: 3.0 Lecture
This course is an introductory survey of Western Art music from the Middle Ages to the present. Emphasis is on the historical, aesthetic, and cultural contexts from which music arises.
Transfer Credit: CSU; UC

MUS 101
INTRODUCTION TO WORLD MUSIC 3.0 UNITS
Class hours: 3.0 Lecture
This course is an introduction to world music. Emphasis is placed on understanding the substantive features of music as well as social, cultural, political, and economic factors that contribute to different musical traditions found throughout the world.
Transfer Credit: CSU; UC

MUS 102
LATINO MUSIC 3.0 UNITS
Class hours: 3.0 Lecture
This course offers students a historical and philosophical survey of Latino music. Musical expression will be discussed in terms of folk/ethnic, popular and classical art forms. The cross-hybridization of musical styles will be addressed with respect to musical forms from Mexico, Cuba, Puerto Rico, and the Dominican Republic. The state of music among Latino populations in the United States also will be included.
Transfer Credit: CSU

MUS 103
JAZZ IN AMERICA 3.0 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 MUSIC**  
**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: 5.0 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, 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 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*

**MUS 109**  
**MUSIC THEORY/MUSICIANSHIP IV**  
**5.0 UNITS**  
Class hours: 5.0 Lecture/2.0 Laboratory  
Prerequisite: MUS 108 or equivalent with a grade of Credit or "C" or higher.  
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  
Prerequisite: MUS 114 or equivalent with a grade of Pass or "C" or higher.  
This course is a continuation of piano study and appreciating the fundamentals of keyboard musicianship. This course may be taken 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 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 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 to advanced level will be studied. This course may be taken a maximum of 2 times.  
*Transfer Credit: CSU; UC*
MUS 116
VOICE I    2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
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 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 116 or equivalent with a grade of Pass or "C" or higher.
This course focuses on a continuation of 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 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 117 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 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 118 or equivalent with a grade of Pass or "C" or higher.
The course continues the study of diction, style, technique, musicianship, and interpretation that occurred in Voice III. With emphasis on stage movement, characterization, and improvisational techniques are explored in greater detail. Singers will be required to perform solos, duets, and in scenes. Popular styles are required to collaborate with recording studio to create projects. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 120
ELEMENTARY GUITAR I    2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: MUS 121 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 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 120 or equivalent with a grade of Pass or "C" or higher.
This class refines guitar-playing techniques used in elementary classical, flamenco, and other pieces. Elements of improvisation, harmonization, and playing in upper positions are included. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 122
INTERMEDIATE GUITAR I    2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: MUS 121 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 a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 123
INTERMEDIATE GUITAR II    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 covers the mastery of the entire guitar fingerboard, a study of intermediate and advanced music in several styles, and the principles of improvisation and transposition. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

MUS 124
CONCERT BAND    2.5 UNITS
Class hours: 2.0 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 a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 124A
BEGINNING BAND    2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
The beginning band is dedicated to the performance of beginning band literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety will be studied. Introduction to ensemble performance and rehearsal techniques is studied. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 125
COMMUNITY SYMPHONIC BAND    2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
This is a concert band, playing the finest traditional and contemporary band literature available. Emphasis is on a high degree of individual musicianship and fine ensemble playing. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
MUS 125A
COMMUNITY BAND   2.5 UNITS
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 a maximum of 4 times.
Transfer Credit: CSU

MUS 126
PEP BAND   2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Recommendation: Music background preferred.
The Pep Band provides entertainment music before and during home football games in the fall season. Additional performances may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. MUS 126 and Physical Education courses with ##’s combined: maximum credit, 4 units.

MUS 127
ORCHESTRA   2.5 UNITS
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 a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 128
COMMUNITY ORCHESTRA   2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
The community orchestra course is dedicated to the performance of standard orchestral literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety of styles will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 129
WOODWIND 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 woodwind ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 130
BRASS 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 brass ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 131
PERCUSSION 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 percussion ensemble playing that only intimate chamber music can provide. Among the topics covered will be musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance experience. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 132
GUITAR ENSEMBLE   2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: MUS 120 or equivalent with a grade of Pass or "C" or higher.
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 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 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 traditional jazz band literature. Emphasis will be placed upon the development of individual musicianship through both large group and small group rehearsal. Musical compositions of a wide variety of styles will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

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 a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 138
COMMUNITY CHORUS  2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
This choral ensemble is designed for the student who has little or no previous vocal experience. Emphasis will be placed upon 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 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 will be studied and performed. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 139
GOSPEL CHOIR  2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
This choral ensemble is designed for the student who has had little or no previous vocal experience. Emphasis will be placed upon the development of individual musicianship through the study of vocal concepts and repertoire. A variety of gospel styles ranging from traditional to contemporary will be studied and performed. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 140
POP CHOIR  2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: By Audition
This choral ensemble is designed for the student who has had previous vocal experience. Emphasis will be placed upon the development of individual musicianship through the study of musical styles, vocal concepts and repertoire. A wide variety of music ranging from Broadway musicals to pop and jazz charts will be studied. Required participation in concerts may include both on-campus and off-campus events. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 141
POP/ROCK ENSEMBLE  2.5 UNITS
Class hours: 2.0 Lecture/2.0 Laboratory
Prerequisite: Audition
This course will provide the students an opportunity to learn and perform contemporary music with an emphasis on pop, rock, and Latin. Aspects to be considered will include style, repertoire, instrumentation, equipment, visual presentation, and management. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 142
JAZZ IMPROVISATION  1.0 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 pre-records media, and transcribed solo study. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

MUS 143
THE JAZZ AND POPULAR SINGER  3.0 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 techniques, improvisation, solo stylization, ensemble sound concepts, and the study of popular literature. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

MUS 144
ELECTRONIC SYNTHESIZER I  2.0 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 a maximum of 2 times.
Transfer Credit: CSU

MUS 145
ELECTRONIC SYNTHESIZER II  1.0 UNIT
Class hours: 1.0 Lecture/2.0 Laboratory
Prerequisite: MUS 144 or equivalent with a grade of Pass or "C" or higher. This course also has 4 lab hours arranged.
This course is a continuation of tape studio practices, digital recording, synthesizer performance, and computer based recording and processing. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

MUS 146
RECORDING TECHNIQUES  2.0 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 recording equipment, visual presentation, and computer based recording and processing. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

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of audio equipment both in a studio situation and on location. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

**MUS 147**

**BASIC APPLIED MUSIC 1.0 UNIT**

Class hours: 1.0 Lecture/6.0 Laboratory
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124,125,126,127,128, 129,130, 131, 132,133,134,138,139,140, or 142

This course offers individuals instruction in voice, piano, or band/orchestral instruments with an assigned instructor on the applied music staff. Emphasis will be placed on study at the beginning level of technique and repertoire. It includes one hour per week recital attendance and one half hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

**MUS 148**

**PRIVATE STUDY/TECHNIQUE 1.0 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, 128, 130, 131, 132,133,134,138,139,140 or 142

This course offers individual instruction in voice, piano, band/orchestral instrument with an assigned instructor on the applied music staff. Emphasis will be placed on technique development at the intermediate level necessary to form stronger musical skills and technical facility. Includes one hour per week recital attendance and one hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

**MUS 149**

**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, 128, 130, 131, 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 hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

**MUS 150**

**PRIVATE STUDY/PERFORMANCE PRACTICE 1.0 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, 128, 130, 131, 132,133,134,138,139,140 or 142

This course offers individuals instruction in voice, piano, or band/orchestral instruments with an assigned instructor on the applied music staff. Emphasis is on performance practice and continued study of advanced repertoire representative of various periods and composers. It includes one hour per week recital attendance and one hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

**MUS 151**

**PRIVATE STUDY/RECITAL PREPARATION 1.0 UNIT**

Class hours: 1.0 Lecture/6.0 Laboratory
Corequisite: Enrollment in a music-performance course related to the student's private study: MUS 124,125,126,127,128,129,130,131,132,133,134,138,139,140, 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 hour individual lesson per week. Performance for a faculty jury will be required at the end of the semester. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

**MUS 152**

**THE ART OF TEACHING BEGINNING PIANO 2.0 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; studio organization and personal development as teacher and musician.
Transfer Credit: CSU

**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 a maximum of 4 times.
Transfer Credit: CSU; UC

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MUS 171

**OCCUPATIONAL WORK EXPERIENCE IN MUSIC** 1.0 UNIT

Class hours: 1.0 Work Experience

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 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). 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 (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.
Announcement of Courses

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)
(For additional courses see Health Occupations)

NRSG 3 (Not Degree Applicable)
PREPARING FOR NURSING  2.0 UNITS
Class hours: 2.0 Lecture
This course is designed for students planning to enter the nursing career. Content includes how to use time and other resources to become a successful nursing student. Overviews of nursing career options and educational pathways are presented, along with trends affecting nursing’s future. Students are introduced to communication skills for use with a diverse student and patient population.

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 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 25 (Not Degree Applicable)
CLINICAL WORKSHOP 1  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 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 a maximum of 3 times.

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 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, re-admitted, 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
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 reporting 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.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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 in order 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 1 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 with first semester of admission. Courses must be completed with a grade of Pass or "C" or higher to progress to the second semester.
Recommendation: NRSG 200 or NRSG 213A 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

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 process.
This course introduces Licensed Vocational Nurses and students transferring from other nursing programs to the theoretical framework used in the Cerritos College Nursing Program. The Nursing Process as a dynamic, systematic way of delivering patient care is defined and demonstrated. Elements of the Roy Adaptation Model for Nursing are taught as the basis for assessing patient care needs. Students learn to apply the Nursing Process and Roy Adaptation Model to clinical practice when planning and providing nursing care. Content also includes communication theory and application, client teaching concepts, assertion theory, and critical thinking foundational skills.
Transfer Credit: CSU

NRSG 220
MEDICAL-SURGICAL NURSING 3 5.5 UNITS
Class hours: 3.0 Lecture/7.5 Laboratory
Prerequisite: NRSG 211, 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 222
MATERNAL/CHILD NURSING 5.5 UNITS
Class hours: 3.0 Lecture/7.5 Laboratory
Prerequisite: NRSG 220 or equivalent with a grade of Pass or "C" or higher.

This course focuses on the theory and clinical application of the Nursing Process based on the Roy Adaptation Model and concepts related to the role of the Associate Degree Nurse as a Provider of Care for patients giving birth in the acute care setting and care of children in acute and clinic 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 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 230 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 course.
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

NRSG 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). 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

NRSG 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 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

PHARMACY TECHNICIAN
(Health Occupations Division)

PHAR 45
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.
Transfer Credit: CSU
Announcement of Courses

PHAR 47
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: H0 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 of "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 63
PHARMACY OPERATIONS II  2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: PHAR 62 with grade of Pass or "C" or higher.
Recommendation: Verification of typing proficiency at 30 wpm or BCOT 135 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.

PHAR 64
PHARMACY OPERATIONS III  2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: PHAR 50 and PHAR 63 or equivalent with grades of Pass or "C" or higher. PHAR 63 may be taken concurrently with PHAR 64; however PHAR 64 cannot be taken prior to PHAR 63.
This course is designed to develop proficiency in manufacture and storage of medications, including intravenous admixtures and antineoplastic substances. It includes disease processes, infection control, manufacturing standards and pharmacy equipment.

PHAR 65
PHARMACY OPERATIONS IV - STERILE AND NON-STERILE COMPOUNDING  2.0 UNITS
Class hours: 2.0 Lecture/1.0 Laboratory
Prerequisite: PHAR 50 and PHAR 62 or equivalent with grades of Pass or "C" or higher.
This course will provide training in the art, science, and technology of pharmaceutical compounding. It is designed for the Pharmacy Technician major to develop proficiency in the skills necessary for successful compounding technique and practice in both the hospital and community pharmacy settings. This course includes the history and theory of pharmaceutical compounding, sterile preparation, use of dosage forms, rationale for use of various drug formulations, patient-specific criteria indicating alternative dosage forms, herbal alternatives, and drug manufacturing and packaging.

PHAR 73
PHARMACY TECHNICIAN

OCCUPATIONAL

WORK EXPERIENCE   3.0 UNITS
Class hours: 1.0 Work Experience
One (1) hour control class each week plus 15 hours of employment per week. The employment must be in a job related to the student’s educational goal.
Occupational Work Experience is a supervised employment program in an approved work station related to the student’s declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or an expansion of their regular responsibilities. This course may be taken a maximum of 2 times based on the number of hours on the job.

PHAR 74
PHARMACY TECHNICIAN

OCCUPATIONAL

WORK EXPERIENCE   4.0 UNITS
Class hours: 1.0 Work Experience
One (1) hour control class each week plus 20 hours of employment per week. The employment must be in a job related to the student’s educational goal.
Occupational Work Experience is a supervised employment program in an approved work station related to the student’s declared major. Students meet with their instructor for a minimum of one hour per week and will receive credit for on-the-job learning experiences that are new or an expansion of their regular responsibilities. This course may be taken a maximum of 2 times based on the number of hours on the job.

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 gastrointestinal system, vitamin and mineral balance, infectious diseases, neoplastic disorders, immunological function, hormonal function, mood and behavior and the eyes. Content includes how drugs exert their effects, adverse effects and major indications for drug use. Emphasis will be placed on routes of administration and product types.

PHAR 85  
PHARMACY TECHNICIAN  
PHARMACOLOGY II  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 out-patient 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). 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 (2 units for 108 hours). This course may be taken a maximum of 2 times.

PHILOSOPHY
(Humanities, Social Sciences 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 satisfactory completion of the Advanced Placement English Examination of the College Entrance Examination Board.
This course develops critical thinking skills necessary for evaluating and formulating argumentative/persuasive essays and practice in applying those skills.  
Transfer Credit: CSU; UC

PHIL 104  
PHILOSOPHY OF CULTURAL DIVERSITY: CHALLENGE AND CHANGE  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: ENGL 52 or equivalent with a grade of Pass or "C" or higher is strongly recommended.
This humanities course is designed to create understanding, appreciation, and tolerance of diverse cultures, particularly those of non-Western civilizations which are ethnic minority groups in American culture. Topics covered will include the nature of culture, the epistemology of cultural diversity, world views, religion, traditional values, ethnocentrism, cultural relativism, cultural pluralism, and the philosophy of liberation.  
Transfer Credit: CSU; UC

*All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.*
PHIL 106  INTRODUCTION TO LOGIC  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher.
This course gives an introduction to the basic principles of inductive and deductive reasoning, the uses of language, definition, analysis of fallacious arguments in various areas, and integration of composition and critical thinking skills.
Transfer Credit: CSU; UC

PHIL 200  WORLD RELIGIONS  3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: Satisfactory completion of the English Placement Process or ENGL 52 or ENGL 155 or equivalent with a grade of Pass or "C" or higher is strongly recommended.
This course presents a comparative study of the major religions of the world including Hinduism, Buddhism, Taoism, Shinto, Judaism, Christianity, Islam, etc. The survey pertains to their origin, historic development, primary source book, theological doctrines and value system.
Transfer Credit: CSU; UC

PHIL 201  INTRODUCTION TO TWENTIETH CENTURY PHILOSOPHY  3.0 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 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 204  PHILOSOPHY OF THE BIBLE I (HEBREW 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 is a general introduction to the philosophical, religious, cultural and historical influences on the development of the Hebrew Scriptures. The methods of critical analysis of Biblical materials from an academic point of view will be presented and discussed.
Transfer Credit: CSU; UC

PHIL 206  PHILOSOPHY OF THE BIBLE II (CHRISTIAN SCRIPTURES)  3.0 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 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

PHIL 209  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 (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

PHOTOGRAPHY
(Fine Arts/Communications Division)

PHOT 100  INTRODUCTORY PHOTOGRAPHY  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
This is a beginning course in the theory and practice of photography. The lecture portion of the class will emphasize historical trends, contemporary applications, and an appreciation of photography as an art and as a craft. The lab portion will introduce the student to camera technique, film exposure, digital capture, 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 PHOT 110 or equivalent with a grade of Pass or "C" or higher.
This photography course is a continuation and expansion of principles taught in the introductory class. This course includes the use of special film processing techniques, advanced exposure techniques, archival print processing, toning techniques, and an
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 PHOT 110 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 manually operable camera. This course is not open to students who are enrolled in or who have received credit in JOUR 130.
Transfer Credit: CSU

PHOT 150
PHOTOGRAPHY AND SOCIETY  3.0 UNITS
Class hours: 3.0 Lecture
This course will examine a variety of topics concerning the interface of photography and society. These include photography and the arts, propaganda and politics, photography and scientific observation, visual anthropology, the visual archive as historical memory, surveillance and power, issues of privacy and censorship, advertising and commodity culture, photojournalism, and the construction of celebrity through images. The manufacturing of personal identity and cultural history through photographic artifacts will be emphasized, as well. Analysis will focus on the way photographic images are used in society and how they help construct our sense of self and the world on a daily basis.
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 from its inception, through postmodernism to the present. The major concepts of photographic representation and the impact of photography on society are also covered.
Transfer Credit: CSU; UC

PHOT 171
OCCUPATIONAL WORK EXPERIENCE IN PHOTOGRAPHY  1.0 UNIT
Class hours: 1.0 Work Experience
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. 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 use, studio strobe lighting techniques, digital photography, and professional presentation of photographs. At the end of the semester, student will be expected 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 PHOT 110 or equivalent with a grade of Pass or "C" or higher.
PHOT 232
APPROACHES TO
STUDIO LIGHTING   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.
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 PHOT 110 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 250
CONTEMPORARY
PHOTOGRAPHIC EXPRESSION  3.0 UNITS
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: PHOT 100 or PHOT 110 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 PHOT 110 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 258
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). 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

PHOT 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 (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, Dance/ Athletics 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 studied.
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.
Announcement of Courses

PE 101B#
SPORTS OFFICIATING FOR MEN’S AND WOMEN’S BASKETBALL  1.0 UNIT
Class hours: 1.0 Lecture
This course is designed to give the student a detailed study of the techniques of officiating men’s and women’s basketball.
Transfer Credit: CSU; UC
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 102A#
SPORTS OFFICIATING FOR BASEBALL  1.0 UNIT
Class hours: 1.0 Lecture
This course is an in-depth study of the mechanics and rules of officiating baseball.
Transfer Credit: CSU; UC
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 102B#
SPORTS OFFICIATING FOR MEN’S AND WOMEN’S TRACK AND FIELD  1.0 UNIT
Class hours: 1.0 Lecture
This course is an in-depth study of the organization and techniques of officiating track and field and cross-country.
Transfer Credit: CSU; UC
*UC credit limits may apply. Any or all of these PE courses with #’s combined: maximum credit, 8 units.

PE 103
THEORY OF COACHING  3.0 UNITS
Class hours: 3.0 Lecture
This course will provide students with a foundation of components to begin a successful coaching career. Emphasis will be placed on ethics, team management, team practice organization, and coaching characteristics. This course will address coaching issues at all levels and age groups.
Transfer Credit: CSU

PE 105
STUDENT ATHLETES IN SOCIETY  2.0 UNITS
Class hours: 2.0 Lecture
This course provides students with an analysis and interpretation of issues affecting student athletes in past and present societies. Physiological, sociological, and psychological aspects of student athletes as related to sport and education will be covered. Students will plan for future career opportunities.
Transfer Credit: CSU

PE 106
WOMEN IN SPORTS  3.0 UNITS
Class hours: 3.0 Lecture
This course provides students with a chronological history, analysis and interpretation of people, events and issues affecting women in sports, in past and present societies. Physiological, sociological and psychological aspects of female athletes as related to sport, history and education will be covered. Students will gain an understanding of the significant events of women in athletics from the past to the present and how their significance will determine the future of women in sports. 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 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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Announcement of Courses

**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 procedures.  
This course is designed to provide cardiovascular fitness training. Emphasis is on individual assessment, programming and selection of training methods including a variety of training options for wheelchair and non-wheelchair user. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU; UC*  
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

**PE 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 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 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 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 a maximum of 4 times.  
Transfer Credit: CSU

**PE 127**  
**ADAPTED STRETCHING & RELAXATION**  **1.0 UNIT**  
Class hours: 0.5 Lecture/1.5 Laboratory  
Recommendation: Student should complete adapted physical education physician health clearance for participation, adapted physical education health history questionnaire, and intake interview assessment.  
This course is designed for students with physical disabilities requiring an individualized exercise program of stretching and relaxation. Emphasis is on individual assessment, programming, and selection of stretching and relaxation techniques to develop and improve flexibility, as well as promote relaxation. This course may be taken a maximum of 4 times.  
Transfer Credit: CU

**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 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 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, muscular endurance, flexibility

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and body composition through various low impact aerobic activities. Lectures may include the areas of basic nutrition, body composition, posture analysis and principles of safe and effective exercise. This course may be taken a maximum of 4 times. Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 132##
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 a maximum of 4 times. Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 133##
STEP AEROBICS  1.5 UNITS
Class hours: 1.0 Lecture/2.0 Laboratory
This course is designed to be a contemporary workout to improve each participant’s strength and cardiovascular fitness level through steady-state stepping movements that will improve health. Students will be exposed to a graduated, continuous system of rhythmic stepping at various platform heights, emphasizing strength, flexibility, and endurance. The class will include proper body alignment and mechanics, basic nutrition, injury prevention, strength training, and personal fitness assessment. This course may be taken a maximum of 4 times. Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 134##
WATER AEROBICS  1.0 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 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 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 resistance exercise to reach goals: Isotonic, Isometric, and Isokinetic. Individual instruction will be given along with the discussion of strengths, weaknesses, and nutritional needs of each individual. This course may be taken a maximum of 2 times. Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 136##
INDOOR CYCLING  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
Students will receive practical instruction in ways to improve their cardiorespiratory endurance, muscular endurance, flexibility, and body composition through indoor bicycling. Basic drills and intensity training will be included. Lectures may include the areas of basic nutrition, body composition, posture analysis, and principles of safe and effective exercise on an indoor bicycle. This course may be taken a maximum of 4 times. Transfer Credit: CSU; UC*

*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 137##
SONG UNIT  2.0 UNITS
Class hours: 0.0 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 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 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 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 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 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 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 144L##
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 course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 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 program and provide the opportunity for each student to establish and practice an individualized program. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 147##
TRIATHLON BASICS  1.0 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 a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits 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 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 a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 150A##
SWIMMING BEGINNING  1.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
Fundamental swimming strokes, elementary diving and water safety. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.
PE 150B##
SWIMMING,
INTERMEDIATE/ADVANCED 2.0 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 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 a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 153A##
BACKPACKING BEGINNING 2.0 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 a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 153B##
BACKPACKING ADVANCED 2.0 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 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 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 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 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 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 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 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 "cut-throat" play. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 158B##
RACQUETBALL INTERMEDIATE/ADVANCED 2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
This course is designed to provide fundamental techniques and rules of racquetball. Strategies, offensive and defensive deployments in singles and doubles will be addressed. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.
This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 171B##
SLOW PITCH 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 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 improve individual and team defense. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 172B##
VOLLEYBALL
INTERMEDIATE/ADVANCED 2.0 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 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##
BASEBALL BEGINNING 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 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 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 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 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 179A##
SOCCER 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 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##
SOCCER
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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 218  
**SOCCER PRE-SEASON CONDITIONING**  
2.0 UNITS  
Class hours: 1.0 Lecture/3.0 Laboratory  
This course is designed to prepare the competitive soccer athlete through the analysis and training of soccer skills, various team offensive and defensive systems, and physical conditioning. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU  

PE 219##  
**SOCCER, WOMEN**  
3.0 UNITS  
Class hours: 10.0 Laboratory  
Training for intercollegiate competition in soccer. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU; UC*  
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 221##  
**SOFTBALL WOMEN**  
3.0 UNITS  
Class hours: 10.0 Laboratory  
Training for intercollegiate competition in women's softball. This course may be taken a maximum of 4 times.  
Transfer Credit: CSU; UC*  
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 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 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 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 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 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 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 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 a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 232##
**TRACK AND FIELD, WOMEN** 3.0 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 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##
**CONDITONING** 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. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 234##
**Volleyball, 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 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##
**WATER POLO, MEN** 3.0 UNITS
Class hours: 10.0 Laboratory
Training for intercollegiate competition in water polo. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 236##
**WATER POLO, WOMEN** 3.0 UNITS
Class hours: 10.0 Laboratory
Training for intercollegiate competition in water polo. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 239##
**WRESTLING** 3.0 UNITS
Class hours: 10.0 Laboratory
This course is designed to develop the student for intercollegiate competition in wrestling. Individual skills, proper conditioning, and warm-up exercises will be emphasized. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##'s combined: maximum credit, 4 units.

PE 240##
**WRESTLING** 3.0 UNITS
Class hours: 10.0 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 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##
**VOLLEYBALL PRE-SEASON 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 taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 241##
**WATER POLO, WOMEN** 3.0 UNITS
Class hours: 10.0 Laboratory
Training for intercollegiate competition in water polo. This course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 251##
**OFF-SEASON TRAINING** 2.0 UNITS
Class hours: 1.0 Lecture/3.0 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 a maximum of 4 times.
Transfer Credit: CSU; UC*
*UC credit limits may apply. Any or all of these PE courses with ##’s combined: maximum credit, 4 units.

PE 253##
**SPORTS PSYCHOLOGY** 3.0 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 is designed to cover topics related to leadership in the fitness industry (athletic coach, physical education instructor, personal trainer, and athletic trainer) and the various styles, theories, and implementation of leadership skills into a fitness setting. Understanding fitness leadership theories will enable the student to establish an effective connection with constituents.
Transfer Credit: CSU; UC

PE 271A
OCCUPATIONAL
WORK EXPERIENCE
ATHLETIC TRAINING 1.0 UNIT
Class hours: 1.0 Work Experience
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.
Transfer Credit: CSU

PE 271B
OCCUPATIONAL
WORK EXPERIENCE IN FITNESS 1.0 UNIT
Class hours: 1.0 Work Experience
One unit of Occupational Work Experience in Fitness Specialist requiring 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 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). 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 (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, Math 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
Announcement of Courses

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 neurodevelopment 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 INTEGUMENTARY 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, Jobst measurement and professional presentations.

Transfer Credit: CSU

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 250
LICENSE EXAMINATION PREPARATION 1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: PTA 246 or equivalent with a grade of Pass or “C” or higher.

This course is designed to assist the Physical Therapist Assistant student to prepare for the national and state law licensing examinations. Content will include the application process, the testing milieu, testing strategies, preparatory study techniques, and a review of material from the Content Outline published by the test editors.

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). 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 (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.
PHYSICS

(Science, Engineering, Math Division)

PHYS 50
PRINCIPLES OF TECHNOLOGY  3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: MATH 40 or equivalent with a grade of Pass or "C" or higher.
This is an introductory course in principles of physics and its applications in a technological world. It will include applications of physical, mechanical, fluid, electrical and thermal systems. The course includes integrated labwork. (This course is not open to students with credit in PHYS 100 or higher.)

PHYS 100
ELEMENTARY PHYSICS  4.0 UNITS
Class hours: 3.0 Lecture/3.0 Laboratory
Prerequisite: MATH 140 or equivalent with a grade of Pass or "C" or higher. Entering students must attain a satisfactory score on the Calculus Readiness Test.
This course is a general survey of the basic principles of physics. It includes mechanics, heat, sound, electricity and magnetism, light, and modern physics with emphasis on mechanics. It is designed primarily as a prerequisite to courses in Engineering Physics.
Transfer Credit: CSU; UC
*UC credit limits may apply. No credit for PHYS 100 if taken after PHYS 101 or PHYS 201.

PHYS 102  (CAN PHYS 2)  (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 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

PHYS 101  (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
*UC credit limits may apply. PHYS 101, PHYS 102 combined with PHYS 201, PHYS 202 and PHYS 203: maximum credit, one series, deduct credit for duplication of topics.

PHYS 201  (CAN PHYS 8)  (CAN PHYS SEQ B)
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
*UC credit limits may apply. PHYS 101, PHYS 102 combined with PHYS 201, PHYS 202 and PHYS 203: maximum credit, one series, deduct credit for duplication of topics.

PHYS 202  (CAN PHYS 12)  (CAN PHYS SEQ B)
ENGINEERING PHYSICS  4.0 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
*UC credit limits may apply. PHYS 101, PHYS 102 combined with PHYS 201, PHYS 202 and PHYS 203: maximum credit, one series, deduct credit for duplication of topics.

PHYS 203  (CAN PHYS 14)  (CAN PHYS SEQ B)
ENGINEERING PHYSICS  4.0 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

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). 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 (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.
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 in 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: 1.0 Work Experience
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. 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.

PMT 44 (Not Degree Applicable) PLASTICS MANUFACTURING TECHNOLOGY OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS
Class hours: 1.0 Work Experience
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. 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.

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.

Announcement of Courses
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 mold making 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 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 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 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 course introduces students to the fundamentals of plastic injection mold designs and fabrication. This course will include 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

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student in production situations similar to those encountered in industry. The student may also have an opportunity to construct a project of his/her own with instructor approval.

**PMT 68**  
**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 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, PMT 67, 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) moldmaking and production techniques. Emphasis is on converting parts currently being made by the hand lay-up method to the closed mold RTM process. Topics include safe RTM equipment operation, mold design, fabrication, resin and catalyst selection, reinforcements, and core materials. Production methods leading to high output and troubleshooting techniques are discussed.

**PMT 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 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). This course may be taken a maximum of 2 times.

**PMT 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 (2 units for 108 hours). This course may be taken a maximum of 2 times.

**PMT 100**  
**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 technology and application of production processes, as well as fabrication methods are covered. This course includes molding, forming, reinforced materials, bonding, laminating, and finishing techniques, and plastic materials identification. 
Transfer Credit: CSU

**PMT 221**  
**MODELMAKING**  
**2.5 UNITS**

Class hours: 2.0 Lecture/2.0 Laboratory  
This course introduces students to the techniques and various materials used in commercial modelmaking. Areas of emphasis include conventional and current trends, tools and materials, dimensional accuracy, and stylistic value. Hands-on fabrication of commercial models is also covered. 
Transfer Credit: CSU

**POLITICAL SCIENCE**  
(Humanities, Social Sciences 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**  
**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. Emphasis will be given to practical policy formulation at all levels.  
*Transfer Credit: CSU; UC*

**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.  
*Transfer Credit: CSU*

**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 field of political science focusing on the major concepts, theories, institutions, processes and policies of government in the United States at the national, state, and local levels. The class is intended for college transfer students, especially political science majors.  
*UC Credit limits may apply. POL 101 and POL 201 combined: maximum credit, one course.*

**POL 210**  
**INTERNATIONAL RELATIONS**  
**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 or equivalent with a grade of Pass or "C" or higher.

This course is a study of basic concepts, theories, and principles of international politics. Emphasis shall be placed on an examination of contemporary world affairs including the importance of nationalism, imperialism, ideology, alliance systems, the rise of the developing nations and the nature of international organizations. Specific case studies shall be examined to illustrate the various principles of international relations.  
*Transfer Credit: CSU; UC*

**POL 220**  
**COMPARATIVE GOVERNMENT**  
**3.0 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 includes a study of comparative systems of government, differing ideologies, and current political problems. Analyses of revolutionary forces in the 20th century are conducted for political insight and understanding.  
*Transfer Credit: CSU; UC*

**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*

**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). 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 (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   (CAN PSY 2)
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 the three views may be utilized to explain 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.
This course is a broad survey of the psychological theories of human personality, encompassing the behavioral, psychoanalytical and humanistic points of view. The focus is the way in which each of the three views may be utilized to explain normal personality adjustment. The class is intended for college transfer students, especially Social Science majors.

Transfer Credit: CSU; UC

PSYC 210   (CAN PSY 6)
ELEMENTARY STATISTICS   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   (CAN PSY 8)
RESEARCH METHODS   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
This course entails a detailed survey of the various types of psycho-active drugs that are used and abused 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/abuse, treatment, prevention, history, laws, and ethics will be covered in this course.

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

*UC credit limits may apply.
PSYC 265, SOC 202, and WS 202 combined: maximum credit, one course.

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: 1.0 Lecture/6.0 Laboratory
Prerequisite: INST 151, INST 152, PSYC 101, PSYC 271 and PSYC 272 with grades of Pass or "C" or higher.
Corequisite: INST 272 with a grade of Pass or "C" or higher.
The field experience includes the practice of working with a Rehabilitation Team under the 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 component 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 an review clinical applications.

Transfer Credit: CSU

PSYC 299
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). 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 119
LEGAL ASPECTS OF MASS COMMUNICATIONS 1.0 UNIT
Class hours: 1.0 Lecture
This course provides a brief introduction to legal aspects faced by those involved in mass media and new media. Major topics include First Amendment rights and responsibilities, libel, privacy, copyright, freedom of information, open meetings, broadcast decency, and student media. This course is not open to students who are enrolled in or who have received credit in JOUR 119 or LAW 119. Transfer Credit: CSU
Announcement of Courses

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

RTV 152
INTRODUCTION TO BROADCASTING  3.0 UNITS
Class hours: 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.
Transfer Credit: CSU

RTV 155
RADIO PRODUCTION  3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
This course is a study and practice of production and departments involved in radio broadcasting. Students make actual broadcasts and recordings and are responsible for staffing and some programming of the campus radio station WPMD-956, 1700 AM, and WPMD on the internet. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

RTV 170
BROADCAST NEWS/WEBCASTING  1.0 UNIT
Class hours: 0.5 Lecture/2.0 Laboratory
Prerequisite: Concurrent enrollment or completion JOUR 101 with a grade of Pass or "C" or higher.
Recommendation: Concurrent enrollment or completion of JOUR 103 or RTV 152 with a grade of Credit or "C" or higher.
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. News gathering 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 171
OCCUPATIONAL WORK EXPERIENCE IN BROADCASTING  1.0 UNIT
Class hours: 1.0 Work Experience
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

RTV 175
SPORTSCASTING  1.0 UNIT
Class hours: 0.5 Lecture/2.0 Laboratory
Prerequisite: RTV 155 or equivalent with a grade of Pass or "C" or higher.
Recommendation: ENGL 52, JOUR 101, or JOUR 106
This course focuses on color and play-by-play announcing of Cerritos College sporting events using the college radio station as a practical laboratory. Students research and announce a variety of sports as they practice the skills of gathering information from a variety of sources. Students synthesize and edit their comments in real time. Ethical and legal aspects of communication are also covered. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

RTV 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). 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 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

Students synthesize and edit their comments in real time. Ethical and legal aspects of communication are also covered. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

RTV 255
EDITING AUDIO  3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: Concurrent enrollment in or prior completion of 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

355

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
number of hours in the semester expected to complete the project (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

**READING**

*(Liberal Arts Division)*

**READ 6** *(Not Degree Applicable)*

**TUTOR TRAINING**  
0.5 UNIT  
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 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. This course may be taken for a maximum of 1 time. This course is offered on a credit/no credit basis only.

**READ 41** *(Not Degree Applicable)*

**INDIVIDUALIZED READING**  
0.5 UNIT  
Class hours: 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 areas 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** *(Not Degree Applicable)*

**READ ACCESS**  
**COLLEGE SUCCESS**  
3.0 UNITS  
Recommendation: Completion of the Reading Placement Process.  
Class hours: 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 to help culturally diverse students make the transition from non-readers and non-credit courses into college-credit programs. It is open to non-readers and non-credit courses into college-credit programs. This course is designed to improve basic reading skills for success in college-level courses. Coursework includes work on fundamental word analysis skills and fundamental comprehension skills. 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). 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 and using basic writing structures and literary elements as aids to comprehension in depth, and mastering speed study techniques and speed research techniques. All methods and techniques are applied to various types of college-level reading materials.

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

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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 Education 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.
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, and 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, Large Income Property Analysis and Report of Value, Land Valuation Analysis and Report, Discounted Cash Flow Values (DCF's), and the manipulation and practical application and use of the six functions of $1.  (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)

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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, applied study of California real estate law intended to be of help in avoiding legal difficulties which can arise with real estate transactions. (Statutorily required by the Department of Real Estate for a Broker’s License.) (Formerly BUSR 125)
Transfer Credit: CSU

RE 130
REAL ESTATE PRACTICE 3.0 UNITS
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 131
INTRODUCTION TO REAL ESTATE APPRAISAL 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 an introduction to the field of real property appraisal. It includes the hands-on evaluation of a single family residence and a multi-family income units. This course includes preparation of and finalization of the Uniform Residential Appraisal Report. Students will learn to use the Uniform Residential Appraisal Report (URAR) with addendums for the single family residence report and will use the Small Residential Income Report for multiple units. This course will qualify for 72 hours of basic Appraisal Education toward the 90 hours necessary for Trainee License, the 120 hours required for Licensed or Certified Residential classification, and the 180 hours required for the Certified General classification. (Formerly BUSR 131)
Transfer Credit: CSU

RE 140
REAL ESTATE PROPERTY MANAGEMENT 3.0 UNITS
Class hours: 3.0 Lecture
The course illustrates how skilled management practice can assure the production of maximum financial yield to investment real estate. The students gain an overview of the many different types of properties in which they might become involved. The course considers the specific duties of management, including the establishing rental schedule, merchandising available space, collecting rent, creating and supervising maintenance schedules and repairs, supervising all purchasing, developing a tenant relationship policy, and maintaining proper accounting records. This course is an elective toward a Real Estate Broker’s License. (Formerly BUSR 140)
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 157
REAL ESTATE INVESTMENTS  3.0 UNITS  
Class hours: 3.0 Lecture  
This course is designed to acquaint the students with real estate investments. Content will include commonly used forms, solving on-the-job problems, case flow analysis including calculation of cash-on-cash return, net present value and internal rate of return, analysis of the client's needs, and modern practices and techniques used in industry today. (Formerly BUSR 157)  
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: 1.0 Work Experience  
Prerequisite: RE 101 or equivalent with a grade of Pass or "C" or higher.  
Corequisite: Two units of 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 173)  
Transfer Credit: CSU

RE 173
REAL ESTATE OCCUPATIONAL WORK EXPERIENCE/ CAREER INTERNSHIP  3.0 UNITS  
Class hours: 1.0 Work Experience  
Prerequisite: RE 101 or equivalent with a grade of Pass or "C" or higher.  
Corequisite: Three units of Real Estate Occupational Work Experience require 180 non-paid hours of work or 225 paid hours of work per semester.  
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom by 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 174)  
Transfer Credit: CSU

RE 174
REAL ESTATE OCCUPATIONAL WORK EXPERIENCE/ CAREER INTERNSHIP  4.0 UNITS  
Class hours: 1.0 Work Experience  
Prerequisite: RE 101 or equivalent with a grade of Pass or "C" or higher.  
Corequisite: Four units of Business Real Estate Occupational Work Experience require 240 non-paid hours of work or 300 paid hours of work per semester.  
Work Experience/Career Internship provides the opportunity for students to apply skills and knowledge learned in the classroom to exacting experiences in the workplace. The aim of the course is to assist students in becoming more productive workers. In the process of doing so, it creates greater communication with increased understanding between the broker/sponsors, student/trainees and the college. First-semester students meet with their instructors for a minimum of one hour per week. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. Second, third, and fourth semester students must meet weekly with the instructor until their participatory assignments and semester work projects have been approved. These courses may be taken for a maximum of 4 times. (Formerly BUSR 174)  
Transfer Credit: CSU

RE 174A
REAL ESTATE OCCUPATIONAL WORK EXPERIENCE/ CAREER INTERNSHIP  4.0 UNITS  
Class hours: 1.0 Work Experience  
Prerequisite: Completion of 12 units in Business Administration, Real Estate or Paralegal or equivalent.  
The 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. (Formerly BUSR 174A)
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 BUSR 195)
Transfer Credit: CSU

SIGN LANGUAGE
(Liberal Arts Division)

SL 101 BEGINNING AMERICAN SIGN LANGUAGE 3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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/1.0 Laboratory
Prerequisite: SL 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 American Sign Language with an emphasis on conceptual accuracy. A deeper appreciation of deaf culture is developed by studying the deaf community, encouraging participation in deaf community events, and understanding various communication technology used by deaf people.
Transfer Credit: CSU; UC

SL 201 ADVANCED AMERICAN SIGN LANGUAGE 3.0 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

SOCIOMETRY
(Humanities, Social Sciences Division)

SOC 101 INTRODUCTORY SOCIOLOGY PRINCIPLES 3.0 UNITS
Class hours: 3.0 Lecture
Sociology 101 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

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, psychosocial 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.
Transfer Credit: CSU; UC

SOC 201 SOCIAL PROBLEMS 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, immigration, 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.
Transfer Credit: CSU; UC

SOC 202 GENDER AND SOCIETY 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: SOC 101 or WS 101 with a grade of Pass or "C" or higher.
This course addresses the concept of gender in our society 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 include cultural ideas of gender as well as gender and the economy, politics, the media, families, and education. It also addresses how gender impacts interactions between individuals and groups.
Transfer Credit: CSU; UC*
*UC credit limits may apply. PSYC 265, SOC 202, and WS 202 combined: maximum credit, one course.

SOC 205 INTRODUCTION TO SOCIAL RESEARCH METHODS 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: SOC 101 or ANTH 100 or equivalent with a grade of Pass or "C" or higher.

Announcement of Courses

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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 220
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 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 229
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). 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

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
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 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  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 103C
ELEMENTARY SPANISH FOR
TEACHER PREPARATION  II  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
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

SPAN 112
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 201 (CAN SPAN B) (CAN SPAN SEQ B)
INTERMEDIATE SPANISH  5.0 UNITS
Class hours: 5.0 Lecture/1.0 Laboratory
Prerequisite: SPAN 102 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 Hispanic writers and guided and original compositions are included. This course will
further develop the appreciation of cultural diversity. The class is conducted primarily in
Spanish.
Transfer Credit: CSU; UC

Announcement of Courses

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

SPAN 205
ADVANCED SPANISH
COMPOSITION  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: SPAN 201 or equivalent with a grade of Pass or "C" or higher.
This course is a continuation of the development of Spanish composition skills
and applied grammar. Compositions are assigned to develop specific writing skills and
improve critical judgment. This course will
further develop the appreciation of cultural diversity. The class is conducted primarily in
Spanish.
Transfer Credit: CSU; UC

SPAN 206
HISPANIC LITERATURE
IN THE MEDIA  3.0 UNITS
Class hours: 3.0 Lecture/1.0 Laboratory
Prerequisite: SPAN 201 or equivalent with a grade of Pass or "C" or higher.
This course will examine the translation of
various literary genres from different periods of Hispanic literature, both Peninsular and Latin American, into various audio/visual
media. An exploration of how literature and audio/visual media create, shape, reinforce,
and/or change culture and impact its images,
stereotypes, and archetypes will be examined.
Theoretical approaches to the adaptation of
literature into other media will be studied.
Transfer Credit: CSU; UC

SPAN 210
HIGHLIGHTS OF
HISPANIC CULTURE  3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: SPAN 102 or SPAN 112 or equivalent with a grade of Pass or "C" or higher.

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This course traces the principal currents of Hispanic culture through Europe and the New World. Using a thematic approach, it traces the historic, political and economic development of the Spanish speaking people, and presents the highlights of Hispanic achievements from the standpoint of civilization and culture. This course, conducted primarily in Spanish, is recommended for Spanish majors.

Transfer Credit: CSU; UC

SPAN 213
LIVING SPANISH
GRAMMAR AND
WRITTEN COMMUNICATION 2.0 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 paragraphs 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). 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 (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; UC

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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

*UC credit limits may apply. SPCH 100 and SPCH 132 combined: maximum credit, one course.

SPCH 110
INTERCULTURAL 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.
This course presents theories and principles of communication with an emphasis on application of concepts relevant to intercultural communication. It has a culture general approach focusing on variables which influence the communication process. Assignments and activities involve students in the analysis of different communication patterns across cultures and the exploration and practice of methods, skills and techniques for improving intercultural communication.
Transfer Credit: CSU; UC

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

*UC credit limits may apply. SPCH 100 and SPCH 132 combined: maximum credit, one course.

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
SPCH 140
ORAL INTERPRETATION OF LITERATURE 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 analysis and interpretation of both prose and verse literature, including study of voice production, structure and content of literature, and techniques of effective oral communication of meaning from the printed page.
Transfer Credit: CSU; UC

SPCH 145
STORYTELLING 3.0 UNITS
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

SPCH 150
ORGANIZATIONAL COMMUNICATION 3.0 UNITS
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

SPCH 160
PARLIAMENTARY PROCEDURE 1.0 UNIT
Class hours: 1.0 Lecture
Prerequisite: SPCH 160 or equivalent with a grade of Pass or "C" or higher.
This course entails an examination of principles, practices and procedures in formal deliberation. Emphasis is placed on parliamentary law.
Transfer Credit: CSU

SPCH 165
GROUP PROCEDURE 1.0 UNIT
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

SPCH 200
CONTEMPORARY COMMUNICATION TOPICS 3.0 UNITS
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 a maximum of 4 times.
Transfer Credit: CSU; UC TBD after admission.

SPCH 229
SPEECH AND LANGUAGE DEVELOPMENT IN CHILDREN 3.0 UNITS
Class hours: 3.0 Lecture
Prerequisite: ENGL 100 or equivalent with a grade of Pass or "C" or higher.
This course is designed to provide the student an understanding of how speech and language develops in normal monolingual and bilingual children and what factors characterize language delay or a language disorder in children with special needs, including exposure to standardized tests and measures of language development. Practice will be provided in eliciting and analyzing speech/language samples from children representing native and non-native speakers and demonstrating normal and delayed speech/language skills. It is recommended for students majoring in speech pathology, the Speech-Language Pathology Assistant Program, elementary education, preschool or special education.
Transfer Credit: CSU

SPCH 235
FUNDAMENTALS OF ARGUMENTATION AND PERSUASION 3.0 UNITS
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

SPCH 236
FORENSICS FOR ONE TOURNAMENT 1.0 UNIT
Class hours: 1.0 Lecture
This course provides students with opportunities to acquire basic oral communication, organizational, and research skills while gaining self-confidence and reducing speaking anxiety. Workshop includes competition at intercollegiate speech and debate tournaments. This course is recommended for all Speech majors. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

SPCH 237
FORENSICS FOR TWO TOURNAMENTS 1.0 UNIT
Class hours: 1.0 Lecture
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. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
Announcement of Courses

SPEECH LANGUAGE PATHOLOGY
(Health Occupations Division)

SLP 100
INTRODUCTION TO SPEECH AND LANGUAGE PATHOLOGY 3.0 UNITS
Class hours: 3.0 Lecture
Recommendation: ENGL 52 or equivalent with a grade of Pass or "C" or higher.
This course introduces foundational skills and principal theories for clinical management of individuals with communicative disorders. Linguistic and cultural variations will be explored. Legal and ethical scope of practice pertinent to roles in the speech-language pathology fields will be delineated.
Transfer Credit: CSU

SLP 110
NORMAL COMMUNICATION, DISORDERS, AND DIFFERENCES 4.0 UNITS
Class hours: 4.0 Lecture
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 120
PHONETICS LAB 0.5 UNIT
Class hours: 0.5 Lecture/0.5 Laboratory
Prerequisite: SLP 100 or equivalent with a grade of Pass or "C" or higher.
Corequisite: SPC 271.
This is a lecture/lab course designed to provide the student with skills and practice in phonetic transcription. Students will learn to transcribe normal and disordered speech using the International Phonetic Alphabet (IPA) for broad transcription. Linguistic variations and regional dialects will be addressed. This course may be taken a maximum of 3 times. (Formerly SLP 120L)
Transfer Credit: CSU

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opportunities. Emphasis is on student competition and events development. This course is recommended for all Speech majors. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

SPCH 238
FORENSICS FOR THREE TOURNAMENTS 1.0 UNIT
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 taken 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 speaking opportunities before audiences at Intercollegiate speech tournaments and community organizations such as Kiwanis, Lions, Rotary, etc. This course may be taken a maximum of 4 times.
Transfer Credit: CSU

SPCH 240
ORAL INTERPRETATION: READERS’ THEATRE 3.0 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). 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 (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

SLP 120
PHONETICS LAB 0.5 UNIT
Class hours: 0.5 Lecture/0.5 Laboratory
Prerequisite: SLP 100 or equivalent with a grade of Pass or "C" or higher.
Corequisite: SPC 271.
This is a lecture/lab course designed to provide the student with skills and practice in phonetic transcription. Students will learn to transcribe normal and disordered speech using the International Phonetic Alphabet (IPA) for broad transcription. Linguistic variations and regional dialects will be addressed. This course may be taken a maximum of 3 times. (Formerly SLP 120L)
Transfer Credit: CSU

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SLP 125  
CHILDHOOD 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.  
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  
2.0 UNITS  
Class hours: 0.5 Lecture/4.5 Laboratory  
Prerequisite: SLP 120, 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  
2.0 UNITS  
Class hours: 0.5 Lecture/4.5 Laboratory  
Prerequisite: SLP 235 or equivalent with a 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.

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). This course may be taken a maximum of 2 times.  
Transfer Credit: CSU; UC

TM 99  
DIRECTED STUDIES  
2.0 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 (2 units for 108 hours). This course may be taken a maximum of 2 times.

THEATRE ARTS  
(Fine Arts/Communications Division)  

TH 101  
INTRODUCTION TO THE THEATRE  
3.0 UNITS  
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
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/2.0 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 a maximum of 4 times.  
This course also has 2 lab hours arranged.  
Transfer Credit: CSU; UC  

TH 106  
ACTORS STUDIO  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
This course is a performance laboratory. Students will rehearse plays and/or projects, which they will perform for invited audiences. Emphasis will be upon developing acting skills, keeping production elements to a minimum. This course may be taken a maximum of 4 times.  

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 a maximum of 2 times.  
Transfer Credit: CSU; UC  

TH 109  
REMOING 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 a maximum of 4 times.  
Transfer Credit: CSU  

TH 110  
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 a maximum of 2 times.  
Transfer Credit: CSU; UC  

TH 111  
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 112  
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 113  
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 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 perform these routines at venues both on-and off-campus. Field trips to local comedy clubs will be arranged. This course may be taken a maximum of 2 times.  

TH 120  
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  
STAGE MAKE-UP  3.0 UNITS  
Class hours: 2.0 Lecture/3.0 Laboratory  
This course provides instruction in techniques of theatrical make-up. Crew assignments in college productions are required. This course may be taken 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; UC  

Announcement of Courses
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 theatre. Crew assignment in college production is 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 a major theatrical production. Students should contact the Theatre Department for a schedule of audition dates. This particular course is for those cast in "minor" roles. The course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

TH 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 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
Prerequisite: Audition
Students in this course will rehearse and perform a major theatrical production. Students should contact the Theatre Department for a schedule of audition dates. This particular course is for those cast in "major" roles. The course may be taken a maximum of 4 times.
Transfer Credit: CSU; UC

TH 133
STAGE CREW ACTIVITY 1.0 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 a maximum of 4 times.
Transfer Credit: CSU

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 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 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 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 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 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 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 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; 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; UC

TH 145
COSTUME PRODUCTION FOR DANCE 1.0 UNIT
Class hours: 1.0 Lecture/3.0 Laboratory
This course introduces the student to the fabrication of costume elements including

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patterning, machine sewing, hand sewing, dyeing, and decoration for dance. This course may be taken a maximum of 4 times.

**Transfer Credit:** CSU; UC

**TH 146**  
**MUSICAL THEATRE**  
**PRODUCTION FOR CHORUS**  
**2.0 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 taken 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 musical instrument. This course may be taken a maximum of 4 times.

**Transfer Credit:** CSU; UC

**TH 150**  
**APPRECIATION AND HISTORY OF THE MOTION PICTURE**  
**3.0 UNITS**

Class course: 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 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 Digital Video (DV) camera and a film (Super 8 or 16 mm) camera to make two short original projects: a non-dialogue film and a fictional film. Writing, storyboarding, pre-production, production, and post-production are also covered. This course may be taken a maximum of 2 times.

**Transfer Credit:** CSU

**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 a maximum of 4 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 a maximum of 2 times.

**Transfer Credit:** CSU; UC

**TH 171**  
**OCCUPATIONAL WORK EXPERIENCE IN THEATRE**  
**1.0 UNIT**

Class hours: 1.0 Work Experience  
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 and craft of editing by analyzing significant works. Students will apply their knowledge of editing techniques using non-linear editing software (iMovie and Final Cut Pro) and video footage shot in class.

**Transfer Credit:** CSU

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Announcement of Courses

TH 208
ADVANCED IMPROV
3.5 UNITS
Class hours: 3.0 Lecture/2.0 Laboratory
Prerequisite: TH 108 or equivalent with a grade of Pass or "C" or higher.
This is an advanced course in the art and craft of acting without a script. Emphasis will be placed upon character, status, narrative, group transformation, and transactional analysis as they apply to scene work and to long-form improv. This course may be taken a maximum of 2 times.
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 and physical performance, 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 taken 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 221 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 a historical perspective. This course may be taken a maximum of 2 times.
Transfer Credit: CSU; UC

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; UC

TH 222
STAGE LIGHTING
3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: TH 223
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 223
PORTABLE ENTERTAINMENT TECHNOLOGY - LIGHTING
3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: TH 108 or equivalent with a grade of Pass or "C" or higher.
This course introduces the student to the principles and basic techniques of portable event staging. The class will cover procedures and practices involved in the general practices and lighting of entertainment events. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

TH 224
PORTABLE ENTERTAINMENT TECHNOLOGY - AUDIO AND STAGING
3.0 UNITS
Class hours: 2.0 Lecture/3.0 Laboratory
Prerequisite: TH 223 or TH 224 or equivalent with grades of Pass or "C" or higher.
This course introduces the student to the principles and basic techniques of portable event staging. The class will cover procedures and practices involved in the staging and audio of entertainment events. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

TH 225
PORTABLE EVENT PRODUCTION
1.0 UNIT
Class hours: 0.5 Lecture/2.5 Laboratory
Prerequisite: TH 223 or TH 224 or equivalent with grades of Pass or "C" or higher.
This course requires the student to set up and run a live event using the skills acquired in the Portable Event Production classes. Students will work in the areas of staging, lighting, and audio on a live entertainment event that is open to the public. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

TH 226
INTRODUCTION TO SCENIC DESIGN
2.0 UNITS
Class hours: 1.0 Lecture/3.0 Laboratory
Prerequisite: TH 223
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 All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
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 256**
**DOCUMENTARY FILM & REALITY TELEVISION PRODUCTION 3.0 UNITS**
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: TH 153 and TH 156 or equivalent with grades of Pass or "C" or higher.
This is a production course in the study of the related non-fictional formats of the documentary film and reality television programs. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**TH 271**
**MUSIC VIDEO PRODUCTION 3.0 UNITS**
Class hours: 2.0 Lecture/4.0 Laboratory
Prerequisite: TH 153 and TH 156 or ART 114 and TH 193 or equivalent with grades of Pass or "C" or higher.
Recommendation: Adequate hearing and vision to produce and edit music videos. This is an introductory course in the study of the aesthetics, history, and the production of music videos. Unlike narrative films, which focus on character development and story plots, music videos generally aim for instant emotional gratification. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**TH 293**
**ADVANCED MOTION PICTURE EDITING 3.0 UNITS**
Class hours: 2.0 Lecture/4.0 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 Final Cut Studio 2 software 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). 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 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 (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**

**WELDING (Technology Division)**

**WELD 39 (Not Degree Applicable)**
**WELD SHOP MATH 2.0 UNITS**
Class hours: 2.0 Lecture
This course is designed to familiarize the student with the shop math typical to the welding industry. Emphasis will be placed on the practical applications of measuring, measuring instruments, area, volume, fractions, decimals and the metric system.

**WELD 43 (Not Degree Applicable)**
**WELDING 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 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. 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. This course may be taken a maximum of 4 times.

**WELD 44 (Not Degree Applicable)**
**WELDING OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS**
Class hours: 1.0 Work Experience
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. 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. This course may be taken a maximum of 4 times.

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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.

**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 4 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 procedures. 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). 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 (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, weld testing and 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 WELD 130 or equivalent with a grade of Pass or "C" or higher.  
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.  
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 welded 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 "0.020" to "0.030" 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 or "C" or higher.  
This is an advanced welding course using the gas tungsten arc welding (GTAW) process. This course is designed to provide 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*

**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, social class and sexual orientation; and identifies the issues of feminism in a global context.  
*Transfer Credit: CSU; UC*

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*All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.*
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 "C" or higher.
This course is designed to encourage the relationship between Cerritos College students who are interested in working with feminist-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 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 connection of human sexuality and gender in an anthropological framework. Biological and cultural bases for the multiple expressions of sexuality and gender found around the world are presented. Case studies include food foraging, horticultural, agricultural, industrial, and post-industrial societies. A central concern is the interaction between subsistence practices, cultural economics, and status in the construction of "normal" and "abnormal" sexualities and genders. Student must be at least 18 years of age or have parental consent in order to take this course. This course is not open to students who are enrolled in ANTH 205 or have received credit in ANTH 205.
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 student 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.

WMT 43 (Not Degree Applicable)
WOODWORKING MANUFACTURING TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE 3.0 UNITS
Class hours: 1.0 Work Experience
One (1) hour control class each week plus 15 hours of employment per week for Woodworking Manufacturing work experience 73 or 20 hours of employment per week for Woodworking Manufacturing work experience 74. The employment must be in a job related to the student’s educational goal. Three units of Woodworking Manufacturing Occupational Work Experience requires 180 non-paid hours of work or 225 paid hours of work per semester. Work experience/career internship provides the opportunity for Woodworking Manufacturing Technology students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. This course may be taken a maximum of 4 times.

WMT 44 (Not Degree Applicable)
WOODWORKING MANUFACTURING TECHNOLOGIES OCCUPATIONAL WORK EXPERIENCE 4.0 UNITS
Class hours: 1.0 Work Experience
One (1) hour control class each week plus 15 hours of employment per week for Woodworking Manufacturing work experience 73 or 20 hours of employment per week for Woodworking Manufacturing work experience 74. The employment must be in a job related to the student’s educational goal. Three units of Woodworking Manufacturing Occupational Work Experience requires 180 non-paid hours of work or 225 paid hours of work per semester. Work experience/career internship provides the opportunity for Woodworking Manufacturing Technology students to apply skills and knowledge learned in the classroom to related experiences on the job/training site. The aim of the course is to assist students in expanding specific job skills. In the process of doing so, it creates greater communication with increased understanding between the student/workers, the college and the employer/trainers. Students also pursue a program of self-evaluation to determine individual job weaknesses and strengths. Semester projects that relate to their major and job skills must be completed on the job/training site. This course may be taken a maximum of 4 times.

WMT 80
RUNNING A WOODWORKING BUSINESS 3.0 UNITS
Class 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
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). This course may be taken a maximum of 2 times.

WMT 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 (2 units for 108 hours). This course may be taken a maximum of 2 times.

WMT 101
INTRODUCTION TO WOODWORKING 3.0 UNITS
Class hours: 2.5 Lecture/2.0 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.
Transfer Credit: CSU

WMT 102
INTRODUCTION TO SOLID WOOD CASEGOODS 4.0 UNITS
Class hours: 2.5 Lecture/5.5 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
WMT 103  INTRODUCTION TO TABLES  4.0 UNITS  
Class hours: 2.5 Lecture/5.5 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 table construction. 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  
Class hours: 2.0 Lecture/4.0 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  
Class hours: 2.0 Lecture/2.0 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  
Class 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 4 times.  
Transfer Credit: CSU

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 UNIT  
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, makers, 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 woodturning 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 120  ARTWORK FRAMING  3.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
This course introduces the student to the skills needed for framing artwork, photographs, archival media, and memorabilia. Topics include design principles, material selection, methods, and tools used for cutting and assembling frames, measuring and cutting mat materials, and hanging methods. Emphasis is placed on the selection and safe use of tools, choice of wood frame materials and finishes, and the proper selection of mats. This course may be taken a maximum of 2 times.  
Transfer Credit: CSU

WMT 123  DECORATIVE BOXES  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 creation of heirloom quality decorative boxes. Advanced skills and techniques will be explored in the design and production of high-quality chests or boxes. Topics include historical styles, box types, materials, and design and construction processes. Emphasis is placed on quality and safety. This course may be taken a maximum of 2 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 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. 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  
Prerequisite: 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 construction of traditional faceframe cabinetry. Classroom topics will include the history, design, fabrication, and safe use of woodworking machinery and materials involved in cabinet construction. This course may be taken a maximum of 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.  
Recommendation: WMT 181 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 course 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 and institutional cabinets. Classroom topics include reading of blueprints, layout, leveling, scribing, milling, fitting and fastening cabinets into place. A major emphasis will be on the safe use of tools and materials involved in cabinet installation. This course may be taken a maximum of 2 times.  
*Transfer Credit: CSU*

WMT 155  
**ARCHITECTURAL MILLWORK**  4.0 UNITS  
Class hours: 2.5 Lecture/5.5 Laboratory  
Prerequisite: WMT 151 or WMT 102 or WMT 103 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 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 155 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, manufacturing and installation of passage doors. Classroom topics include the history, design, milling, assembly and installation of doors. A major emphasis will be on the safe use of woodworking machinery and materials involved in door millwork. This course may be taken a maximum of 2 times.  
*Transfer Credit: CSU*

WMT 159  
**SOLID SURFACE FABRICATION**  4.0 UNITS  
Class hours: 2.0 Lecture/4.0 Laboratory  
Prerequisite: WMT 101 or WMT 151.  
This course introduces the student to the methods, materials, tools, and machinery used in the design, manufacturing, and installation of solid surface countertops, as well as the safe use of specialized machinery and materials involved in solid surface fabrication. This course will prepare students for solid surface fabrication industry certification/qualifications. 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.
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**

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**

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 advanced course covers the design and building of museum quality solid wood cabinets. Topics include the aesthetics of design, making scale mockups, selection of grain and color to complement the design, and advanced joinery techniques. Coopering, bent laminating, and basic veneering are also covered. Emphasis is placed on the highest degree of workmanship and design. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**WMT 205**

**INTRODUCTION TO COMPUTER OPERATIONS FOR CABINETMAKING AND DESIGN**

Class hours: 3.0 Lecture/1.0 Laboratory
This course introduces students to computer aided cabinet design and manufacturing. Topics include the use of AlphaCAM software and its role in woodworking operations on the computer numerical control (CNC) router. Topics include software operations, preparing G-Code instructions for the machine, and use of the CNC router. Emphasis is placed on design, planning, safety, and efficiency. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**WMT 206**

**ADVANCED TABLES**

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 table such as dining and conference table, expanding tables, and torsion box table top construction. Topics include bent lamination, curved part joinery and angled joinery. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**WMT 207**

**WOOD VENEERING**

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**

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 2 times.

**Transfer Credit: CSU**

**WMT 210**

**ROUTERS AND ROUTER TABLES**

Class hours: 2.0 Lecture/6.0 Laboratory
Prerequisite: WMT 101 or WMT 151 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.

**Transfer Credit: CSU**

**WMT 211**

**THE WORKBENCH CLASS**

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**

**CABINETMAKING AND DESIGN**

Class hours: 3.0 Lecture/1.0 Laboratory
This course allows students to perfect and hone skills acquired during previous woodworking courses. In this lab, students design and construct woodworking projects of their choice that are relevant to the subject matter being taught during the same time period. This course may be taken a maximum of 4 times.

**Transfer Credit: CSU**

**WMT 213**

**ADVANCED WOOD TURNING**

Class hours: 1.0 Laboratory
Prerequisite: WMT 102 or WMT 103 or equivalent with grades of Pass "C" or higher.
This advanced course covers the design and manufacture of various types and shapes of substrates. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

**WMT 214**

**POLYCHROMATIC AND CLOSED FORM TURNING**

Class hours: 3.0 Units
Prerequisite: WMT 102 or WMT 103.
This advanced woodturning course enhances the beginning woodturning student’s skill. Topics include polychromatic bowl construction, closed-form vessel turning, and other advanced skills. This course may be taken a maximum of 2 times.

**Transfer Credit: CSU**

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
**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 a maximum of 4 times.  
Transfer Credit: CSU

**WMT 229L**  
**COMPREHENSIVE WOODWORKING MANUFACTURING SPECIALTY**  
2.5 UNITS  
Class hours: 8.0 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 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 manufacturing of a historical chair, the Morris chair. Hand tools, machinery and hand power tools are used in an advanced setting. Topics include planning, manufacturing, utilizing solid wood joinery, complex laminations, subassembly and final assembly as well as finishing. The class focuses on the history and design of the Morris Chair, the first recliner. This course may be taken a maximum of 3 times.  
Transfer Credit: CSU

**WMT 235**  
**WINDSOR CHAIR**  
3.0 UNITS  
Class hours: 2.0 Lecture/3.0 Laboratory  
Recommenda­tion: WMT 118 with a grade of Pass or "C" or higher.  
This course will introduce the student to the materials, methods, and tools used to make and manufacture a reproduction of an eighteenth century Windsor chair. Topics include layout, turning, bending, and shaping the various chair components, final assembly and finishing of the chair. Emphasis is placed on the safe use of tools and materials used in the chair construction. This course may be taken a maximum of 2 times.  
Transfer Credit: CSU

**WMT 237**  
**AMERICAN FURNITURE**  
4.0 UNITS  
Class hours: 2.5 Lecture/5.5 Laboratory  
Prerequisite: WMT 103 or equivalent with a grade of Pass or "C" or higher.  
Recommendation: WMT 102, WMT 118, and WMT 201  
This course is designed to increase the students’ knowledge in the use of machine woodworking and woodworking hand tools and expand their understanding of wood technology. This advanced course will reinforce skills learned in previous courses and challenge the student to demonstrate the ability to plan, design, fabricate, reproduce, and finish a piece of traditional furniture. Students will construct woodworking projects that are relevant to the subject matter being taught during the same period of time. Topics include traditional American furniture (19th century and earlier) including: chairs, beds, and caseworks. Emphasis is placed on machine and hand tool skills and safety. 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 and WMT 101 or WMT 151 or equivalent with grades 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 243**  
**ADVANCED WOOD VENEERING**  
4.0 UNITS  
Class hours: 2.5 Lecture/5.5 Laboratory  
Prerequisite: WMT 203 or equivalent with a grade of Pass or "C" or higher.  
This course builds on the WMT 203 Wood Veneering course, introducing the student to more advanced veneering topics. Topics include marquetry, inlay, sand shading, and curved panels for use in furniture and cabinet projects. This course may be taken a maximum of 2 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 grades of Pass or "C" or higher.  
Recommendation: WMT 201  
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. This 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.  
Recommendation: WMT 130 and WMT 201 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

All courses on this page are Title V Associate Degree applicable/credit courses unless otherwise noted.
WMT 248 PRODUCTION
FURNITURE 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 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 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 faceframe cabinetmaking skills by the use of tools and machinery specific to advanced faceframe cabinetmaking and millwork. Topics include 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 252 INTERMEDIATE 32 MM SYSTEM OF 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, milling, and assembly and installation of mantels and wall paneling. A major emphasis will be focused on the safe use of woodworking machinery and materials involved in architectural millwork. This course may be taken a maximum of 2 times.
Transfer Credit: CSU

WMT 259L SOLID SURFACE MANUFACTURING SPECIALTY LAB  2.0 UNITS
Class hours: 6.0 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
Announcement of Courses

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 Pass 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 a maximum of 2 times.
Transfer Credit:  CSU

ZOOLOGY
(Science, Engineering, Math Division)

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
ADULT EDUCATION

(Community, Industry, Tech Educ)

AED 5.05
WORD PROCESSING 0.0 UNIT
Class hours: 10.0 Laboratory
This course is designed to provide an introduction 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 0.0 UNIT
Class hours: 2.0 Lecture/2.0 Laboratory
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 0.0 UNIT
Class hours: 2.0 Lecture/4.0 Laboratory
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 0.0 UNIT
Class hours: 0.8 Lecture/0.8 Laboratory
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 0.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
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
FITNESS FOR OLDER ADULTS 0.0 UNIT
Class hours: 0.5 Lecture/1.0 Laboratory
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. This course may be repeated.

AED 10.08
EXERCISE FOR ADULTS 0.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 0.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
A slow cardiovascular workout for seniors, combining low-impact aerobics, walking, stretching, and strengthening of major muscle groups.

AED 10.10
MOVEMENT INTO FITNESS 0.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
This fitness program is designed for older adults to increase flexibility and strengthen major muscle groups. This course may be repeated.

AED 10.11
LT WTS/SENIORS: COND IN GYM 0.0 UNIT
Class hours: 3.0 Laboratory
An introduction to the use of light weights and weight machines in the gym to condition various muscle groups of the body. The course is designed specifically for senior citizens.

AED 10.12
DEFENSE AWARENESS FOR SENIORS 0.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
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 0.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
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 0.0 UNIT
Class hours: 1.0 Lecture/1.0 Laboratory
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 11.10
PERSONAL CARE/OLDER ADULT 0.0 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 MELODRAM A 0.0 UNIT
Class hours: 3.0 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 14.04
THE ARTS COME ALIVE  0.0 UNIT
Class hours: 0.2 Lecture
A lecture-discussion course offering mature students and examination of how the Arts serve, influence, and stimulate their lives. Students will share what they consider as needs by which they may utilize and enjoy fine arts with a major purpose of shaping an ongoing course in the Arts to serve senior citizens. Lecture discussion will relate to philosophical and societal basic of arts with contemporary art movements explored, especially the performing arts.

AED 14.05
ITALIC HANDWRITING  0.0 UNIT
Class hours: 0.2 Lecture/0.5 Laboratory
A survey course of italic handwriting designed to improve penmanship. Emphasis will be placed on learning through practice. Other aspects of calligraphy will be introduced in discussion and supported with visual aids.

AED 14.06
TAP DANCE FOR OLDER ADULTS  0.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
Learn the fundamentals of tap dance in this class for older adults. Shuffle-ball-change, waltz clog, time step, diggs, 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/SENIORS  0.0 UNIT
Class hours: 1.0 Lecture/0.5 Laboratory
Music program designed to encourage verbal expression, physical movement, and social interaction through song and music listening.

AED 14.08
CREATIVE ARTS/CRAFTS/ADULTS  0.0 UNIT
Class hours: 2.0 Laboratory
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 the creation of original art forms, such as sculpture, painted items or original designs.

AED 14.09
ARTS & CRAFTS FOR ADULTS  0.0 UNIT
Class hours: 2.0 Laboratory
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 may be repeated.

AED 14.10
CRAFTS FOR SENIORS  0.0 UNIT
Class hours: 2.0 Lecture/2.0 Laboratory
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  0.0 UNIT
Class hours: 2.0 Lecture/2.0 Laboratory
A quilting frame for the old time "quilting bee" atmosphere is center stage for class. Students can participate in hand quilting, quilt 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: HIST & APPREC  0.0 UNIT
Class hours: 3.0 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 14.13
VOCAL ARTS WORKSHOP FOR SENIORS  0.0 UNIT
Class hours: 1.5 Lecture/1.5 Laboratory
This course will examine the fundamentals of vocal techniques for solo and small ensemble including proper warm-up techniques, vocal pedagogy, and physiology of singing, musicianship, performance techniques and instructor-guided practice. This course may be repeated.

AED 14.14
ADULT FOUR-PART CHORUS FOR SENIORS  0.0 UNIT
Class hours: 1.5 Lecture/1.5 Laboratory
This course will examine the fundamentals of vocal techniques for four-part groups including proper warm-up techniques, vocal pedagogy, physiology of singing, musicianship, performance techniques and instructor-guided practice, and learning and singing a four-part harmony.

AED 14.15
COMMUNITY BAND/OLDER ADULT  0.0 UNIT
Class hours: 1.0 Lecture/2.0 Laboratory
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 22.07
STRETCHING THE DOLLAR  0.0 UNIT
Class hours: 1.5 Lecture
This is a course designed for community persons desirous of basic ideas in personal, individual/family financial matters enabling them more purchasing power. Course presents methods to lower costs yet maintaining personal satisfaction.

AED 22.08
LIFE SKILLS  0.0 UNIT
Class hours: 3.3 Lecture
The Life Skills course is designed for people who require a training program that is easily accessible and readily available. The course is tailored for those who desire greater self-confidence and wish to improve their interpersonal skills in the workplace. The course will allow students to build a broad range of knowledge in several areas. Building self-esteem, managing stress, setting goals, and learning how to communicate effectively are some of the skills students will learn and practice.

AED 22.09
TOPICS OF INTEREST SENIORS  0.0 UNIT
Class hours: 2.0 Lecture
This course covers topics of interest to senior citizens and their special needs and concerns. The course is designed to assist older adults in developing physical emotional and mental skills needed to function better and enrich their quality of life. This course may be repeated.

AED 22.10
VOTER EDUCATION/SR CITIZEN  0.0 UNIT
Class hours: 0.4 Lecture
Effective voter education demonstrates to voters how political issues affect them and how their votes make a difference. This course is designed to prepare the older adult to execute his/her franchise to vote in an informed manner.

AED 22.11
CONTEMPORARY ISSUES/ADULTS  0.0 UNIT
Class hours: 2.0 Lecture
Designed to provide older adults with avenues for communication with city/community officials.

AED 23.48
POSITIVE PARENTING  0.0 UNIT
Class hours: 3.3 Lecture
This course is designed to help interested persons develop parenting skills. This course will examine the critical stages of child and adolescent development and offer positive suggestions to aid each parent in helping his child’s growth. Also recognized will be diverse present-day family styles such as one-parent, step, blended, and two-parent families, as well as families with both parents working. The joy of parenting will be stressed as well as the individual parenting concerns of each person attending.

AED 24.03
ADULT NUTRITION  0.0 UNIT
Class hours: 1.0 Laboratory
Discuss nutrition with an emphasis on the healthy body, the heart, cholesterol, and blood pressure. Learn to plan well-balanced meals and work toward maintaining good nutritional habits.

AED 24.04
COOKING FOR SENIORS  0.0 UNIT
Class hours: 0.5 Lecture/1.5 Laboratory
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 student will learn to select well-balanced meals, whether the meals are purchased or prepared at home. This course may be repeated.

AED 36.01
OCCUPATIONAL ORIENTATION  0.0 UNIT
Class hours: 4.0 Lecture
The Occupational Orientation/Preparation course is designed to prepare students to enter a new job position and/or advance in the workplace. The goal of the course is to build a broad range of knowledge in basic job competencies, evaluate personal abilities regarding vocational areas, and to provide job readiness skills to those seeking employment. The course will allow students to acquire skills that will allow them to be competitive in the job market.

AED 36.02
INTRODUCTION TO THE BUILDING TRADES AND CONSTRUCTION INDUSTRY  0.0 UNIT
Class hours: 2.0 Lecture
This course is intended to introduce students to the wide spectrum of careers that are available in the Building Trades and Construction Industry. The students will receive the foundational knowledge and basic skills required for entry into postsecondary education (Apprenticeship Program) and employment in the Building Trades and Construction sector. This course will integrate academic and technical preparation, with an emphasis on career awareness, career exploration and skill preparation.

AED 36.03
BASIC READING SKILLS FOR THE BUILDING TRADES AND CONSTRUCTION INDUSTRY  0.0 UNIT
Class hours: 2.0 Lecture
This course is intended to help students understand the foundational knowledge required for entry into postsecondary education (Apprenticeship Program) and employment in the Building Trades and Construction sector. The course is designed to develop reading skills that can be applied to the various building and construction trades.

AED 36.04
BASIC MATH SKILLS FOR THE BUILDING TRADES AND CONSTRUCTION INDUSTRY  0.0 UNIT
Class hours: 2.0 Lecture
This course is intended to help students understand the foundational knowledge required for entry into postsecondary education (Apprenticeship Program) and employment in the Building Trades and Construction sector. The course is designed to develop mathematical skills that can be applied to the building trades and construction industry through practice and application.

AED 36.05
INTRODUCTION TO BASIC WELDING FOR THE BUILDING TRADES AND CONSTRUCTION INDUSTRY  0.0 UNIT
Class hours: 2.0 Lecture/3.0 Laboratory
This course is intended to provide students with the foundational knowledge and basic skills required for entry into postsecondary education (Apprenticeship Program) and employment in the Building Trades and Construction industry. The course will train students in gas welding, as well as any combination of arc welding processes, thus allowing them to be able to weld metal parts and layout materials, as specified by diagrams, blueprints, or written specifications. Students will also be trained on how to safely use different tools and equipment designed for metal fabrication.
AED 39.01
INTRODUCTION TO PAINTING/COATING/DECORATING TRADES 0.0 UNIT
Class hours: 2.2 Lecture
This course is an introductory course in a series of specialty courses for people involved in the painting/coating/decorating industry. Emphasis will be placed on safety and the overall aspects of this specialty industry. Demonstrations will cover basic surface preparation and application of materials.

AED 39.02
PROFESSIONALISM IN PAINTING TRADES/JOB PLANNING AND SURFACES 0.0 UNIT
Class hours: 2.2 Lecture
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 demonstrations will cover surface preparation and application of materials.

AED 39.03
INTRODUCTION TO PAINTS, COATINGS, SEALANTS, REPAIRS AND FILLERS, AND SURFACE CONDITIONS 0.0 UNIT
Class hours: 2.2 Lecture
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 0.0 UNIT
Class hours: 2.2 Lecture
This is the fourth course in a series of specialty courses developed for people in the painting and decorating industry. Emphasis will be placed on application techniques and potential problems in these painting processes. Demonstrations will include applications of flat and enamel coatings for interior and exterior surfaces. Jobsite cleanup will be addressed.

AED 39.05
JOB PLAN FOR PAINT/COAT 0.0 UNIT
Class hours: 1.8 Lecture/0.4 Laboratory
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 demonstrations in the areas of job safety, materials planning, equipment planning, and important factors related to paint failures and remedies. Lectures 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 0.0 UNIT
Class hours: 1.3 Lecture/0.9 Laboratory
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 topic areas of airless spray painting, drywall finishing and patching, and specialty coating applications.

AED 39.07
WALLCOVERINGS, DECORATIVE FINISHES, HVLP, AND BRUSH & ROLL 0.0 UNIT
Class hours: 0.9 Lecture/1.3 Laboratory
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 general safety professionalism and HVLP spray systems. Lecture and demonstrations will include HVLP spray systems, equipment and application, wallcoverings, decorative finishes, and interior brush and roll.

AED 39.08
APPLICATION & PREPARATION, FAILURES & REMEDIES, AND EXTERIOR BRUSH & ROLL 0.0 UNIT
Class hours: 1.3 Lecture/1.9 Laboratory
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 & CONTROL, COLOR TINTING, AND WALLCOVERINGS 0.0 UNIT
Class hours: 1.1 Lecture/1.1 Laboratory
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, WOOD FINISHING, AND SPRAYING WITH SPECIAL AND ELECTRONIC DEVICES 0.0 UNIT
Class hours: 1.1 Lecture/1.1 Laboratory
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 and wood finishes and spraying with special devices. This will include lectures and demonstrations in the areas of texture material and application, applying finishes and stains to wood, and spraying with devices.

AED 39.11
HIGH PERFORMANCE COATINGS, PRIMERS, URETHANES & EPOXIES, ARCHITECTURAL DRAWINGS & GRAPHICS 0.0 UNIT
Class hours: 1.8 Lecture/0.4 Laboratory
This is the eleventh course in a series of specialty courses for apprentices involved in the painting/coating/decorating industry. Emphasis will be placed on high performance coatings, graphics, and graining applications. This will include lectures and demonstrations in the area of primers, urethanes, epoxies, blueprints, graphics, quality control, and graining.
AED 39.12  
WALLCOVERING APPLICATION  0.0 UNIT  
Class hours: 0.4 Lecture/1.8 Laboratory  
This is the twelfth course in a series of  
specialty courses for apprentices involved  
in the painting/coating/decorating industry.  
Emphasis will be placed on coatings and  
finishes wall covering application. This  
will include lectures, demonstrations and  
and hands-on training in the areas of preparation,  
hanging, and correcting defects.

AED 40.00  
IW-MIXED BASE-STRUCTURAL  0.0 UNIT  
Class hours: 2.2 Lecture/0.8 Laboratory  
This course will acquaint the apprentice  
with specifications that constitute a safe and  
healthy working environment under OSHA.  
The apprentice will have an overview of  
construction blueprints commonly used with  
emphasis on function and interpretation.  
Students will be introduced to symbols,  
terms, and application of blueprints within  
the construction industry. This course offers  
a brief review of some math skills and the  
ability to apply these skills to solve  
typical problems that are apt to arise in the  
construction trades.

AED 40.01  
IRONWORKERS -  
FIRST AID MULTI-MEDIA  0.0 UNIT  
Class hours: 0.2 Lecture/0.2 Laboratory  
A non-professional course of Standard First  
Aid designed to teach knowledge and skills  
that are needed for the emergency care of  
the injured and ill until medical care can be  
obtained, and to create an active interest in  
the prevention of accidents.

AED 40.05  
IW-ADVANCED WELDING  0.0 UNIT  
Class hours: 1.3 Lecture/1.3 Laboratory  
The apprentice will be trained in metal-arc  
gas metal-arc welding with emphasis on  
skill development in both processes of  
ferrous and nonferrous metals in the flat,  
vertical and overhead positions, and for all  
types of joints. This course may be repeated  
as necessary.

AED 40.06  
IW-TRADE SCIENCE  0.0 UNIT  
Class hours: 3.0 Lecture  
This course introduces the ironworkers to  
the labor movement and apprenticeship  
training. It acquaints the ironworkers with  
the privileges and obligations he/she accepts  
as members of this trade.

AED 40.08  
IW-EXTENSION AND REVIEW  0.0 UNIT  
Class hours: 2.2 Lecture/0.5 Laboratory  
This course will offer a study review of the  
practices and procedures used in the field of  
ironworking. The purpose is to strengthen  
the competencies and complete the training  
requirement of a journeyperson.

AED 40.09  
IW-GEN RIGGING/  
REINFORCING  0.0 UNIT  
Class hours: 1.8 Lecture/0.7 Laboratory  
This course introduces the proper application  
of fiber line, steel cable, and chain in various  
tackles 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  
IW-WELDING I/REINFORCING  0.0 UNIT  
Class hours: 1.3 Lecture/1.4 Laboratory  
This course introduces basic understanding  
of the structure of ferrous metals and their  
reactions to heat. This course also provides  
knowledge of the equipment and materials  
employed in the use of shielded metal-arc,  
gas shielded-arc, and oxy-acetylene welding.

AED 40.11  
IW-WELDING II/REINFORCING  0.0 UNIT  
Class hours: 1.6 Lecture/0.9 Laboratory  
This course will introduce the apprentice to  
the 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  
IW-REINFORCING IRON I  0.0 UNIT  
Class hours: 2.1 Lecture/0.7 Laboratory  
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 construction 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  
IW-REINFORCING IRON "A"  0.0 UNIT  
Class hours: 2.5 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 40.14  
IW-REINFORCING IRON "B"  0.0 UNIT  
Class hours: 2.5 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 40.15  
IW-REINFORCING IRON II  0.0 UNIT  
Class hours: 1.8 Lecture/0.7 Laboratory  
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 40.16  
IW-REINFORCING IRON "C"  0.0 UNIT  
Class hours: 2.5 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
Announcement of Courses

IW-REINFORCING IRON "D" 0.0 UNIT
Class hours: 2.5 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.

IW-GENERAL RIGGING/STRUCTURAL 0.0 UNIT
Class hours: 2.2 Lecture/0.8 Laboratory
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.

IW-WELDING I-STRUCTURAL 0.0 UNIT
Class hours: 1.7 Lecture/1.3 Laboratory
This course introduces basic understanding of the structure of ferrous metals and their reactions to heat. It also provides knowledge of the equipment and materials employed in the use of metal-shielded arc, gas shielded-arc, and oxy-acetylene welding. The student will cover OSHA standards.

IW-WELDING II-STRUCTURAL 0.0 UNIT
Class hours: 2.2 Lecture/0.8 Laboratory
This course continues to help the apprentice understand the structure of ferrous metals and their reactions to heat. This course provides additional knowledge of equipment and materials employed in the use of shielded metal-arc, gas shielded-arc, and oxy-acetylene welding.

IW-STRUCTURAL STEEL I 0.0 UNIT
Class hours: 2.5 Lecture/0.8 Laboratory
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.

IW-STRUCTURAL STEEL II 0.0 UNIT
Class hours: 2.2 Lecture/1.1 Laboratory
This course continues to develop understanding of both theory and practice built around the study of blueprint reading and the structural erection procedures and proper construction of various steel structures.

IW-METAL BUILDING ERECTION I 0.0 UNIT
Class hours: 1.0 Lecture/0.5 Laboratory
This class provides the apprentice with 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, and assembly of prefab buildings.

IW-EMPLOYER/RELATIONS,SAFETY AND FIRST AID 0.0 UNIT
Class hours: 3.0 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.

IW-FUNDAMENTALS WELD/STEEL FABRICATION 0.0 UNIT
Class hours: 3.0 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.

IW-MIXED BASE-REINFORCING 0.0 UNIT
Class hours: 1.8 Lecture/0.7 Laboratory
This course will acquaint the apprentice with specifications that constitute a safe and healthy working environment under OSHA. It provides an introduction to the rights and obligations that this act imposes. The apprentice will 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.

IW-METAL BLDG ERECTION II 0.0 UNIT
Class hours: 0.8 Lecture/0.5 Laboratory
This course provides the Apprentice with experience and knowledge of pre-engineering metal buildings. The course emphasizes sheet metal sections, fasteners, footings, and installation.
Announcement of Courses

AED 40.52
IW-ORIENTATION II 0.0 UNIT
Class hours: 1.5 Lecture/1.5 Laboratory
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/REINFORCING IRON 0.0 UNIT
Class hours: 2.5 Lecture/0.6 Laboratory
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 blue prints are covered.

AED 40.54
IWS-REINFORCING DETAIL II 0.0 UNIT
Class hours: 2.4 Lecture/0.6 Laboratory
This course will provide knowledge, procedures and practices employed by the detailer of reinforcing iron in the preparation of placing drawings and bar lists. 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
IWS-REINFORCING OSHA 500 0.0 UNIT
Class hours: 2.2 Lecture/0.6 Laboratory
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 40.56
IWS-REI/IRONWORKER HISTORY 0.0 UNIT
Class hours: 2.2 Lecture/0.6 Laboratory
This course instructs the apprenticeship student about the history of the Ironworker union from its birth in 1896 to the present.

AED 40.57
IWS-REINFORCING LEAD HAZARD 0.0 UNIT
Class hours: 2.2 Lecture/0.6 Laboratory
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
IWS-ARCHITECTURAL AND ORNAMENTAL I 0.0 UNIT
Class hours: 1.0 Lecture/2.0 Laboratory
This course is designed to train ironworkers how to install the various types of doors commonly found in today's modern structures. The student will receive training in accordance with OSHA standards and the many aspects of safety, compliance, scheduling, jurisdiction, and labor law. The student will receive instruction regarding the duties of the ironworker foreman, general foreman, and superintendent's and forklift operation.

AED 40.61
IWS-PRECAST CONCRETE 0.0 UNIT
Class hours: 1.7 Lecture/1.1 Laboratory
This course provides knowledge, coordination task elements and skills 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
IWS-IRONWORKER HISTORY 0.0 UNIT
Class hours: 2.2 Lecture/0.6 Laboratory
This course deals with the history of the Ironworkers Union from its birth in 1896 up to the present time.

AED 40.63
IWS-STRUCTURAL LEAD HAZARD 0.0 UNIT
Class hours: 3.0 Lecture
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
IWS-STRUCTURAL OSHA 500 0.0 UNIT
Class hours: 0.8 Lecture
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 41.02
INTRODUCTION TO APPRENTICESHIP 0.0 UNIT
Class hours: 0.4 Lecture
This course will acquaint the structural/reinforcing ironworker apprentice with the text, materials, pre-test and home study assignments that must be completed prior to attending the forty (40) hour week training program.

AED 41.03
IW - REINFORCING II 0.0 UNIT
Class hours: 2.2 Lecture/0.6 Laboratory
This course provides students 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 III 0.0 UNIT
Class hours: 1.7 Lecture/1.1 Laboratory
This course teaches the ironworker how to erect storefronts and entrance ways and how to install the various types of doors commonly found in today's modern structures. The student will be introduced to the various types of materials used and the installation
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, ladders, toilet partitions, vanity supports, relief angles and flagpoles and how to install chain link fences.

**AED 41.05**  
**IW - ARCHITECTURAL II**  
*0.0 UNIT*  
Class hours: 1.7 Lecture/1.1 Laboratory  
This course will teach 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 student 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**  
*0.0 UNIT*  
Class hours: 1.7 Lecture/1.1 Laboratory  
This course provides the student with training in structural steel erection including history, safety, planning and scheduling, handling materials, and erecting structural steel members.

**AED 41.07**  
**POST-TENSION II**  
*0.0 UNIT*  
Class hours: 2.2 Lecture/0.6 Laboratory  
This course is designed to provide the ironworker student with training in post-tension 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 proper procedures for detensioning and perform lift-offs on post-tensioning systems. Students will 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**  
*0.0 UNIT*  
Class hours: 2.2 Lecture/0.6 Laboratory  
This course provides the ironworker student with training in post-tensioned reinforcing, including single-strand unbonded system 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 proper procedures for detensioning and perform lift-offs on post-tensioning systems.

**AED 41.09**  
**IW - WELDING III - REINFORCING**  
*0.0 UNIT*  
Class hours: 2.2 Lecture/0.6 Laboratory  
This course will introduce the apprentice to shop safety in welding and burning. 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 SECOND LANGUAGE**  
*0.0 UNIT*  
Class hours: 3.0 Lecture  
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 SECOND LANGUAGE**  
*0.0 UNIT*  
Class hours: 5.0 Lecture  
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**  
*0.0 UNIT*  
Class hours: 1.0 Lecture/2.0 Laboratory  
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 ESL**  
*0.0 UNIT*  
Class hours: 6.0 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**  
*0.0 UNIT*  
Class hours: 5.0 Lecture  
This course is designed to prepare the adult student for college English. It is aimed at improving reading, writing, and grammar skills.

**AED 42.05**  
**SUPERVISED TUTORING**  
*0.0 UNIT*  
Class hours: 1.7 Lecture  
This course is intended to give students in need of special supplemental instruction in a subject area an opportunity to develop and improve their skills and/or knowledge of the subject. It is an open entry/open exit course. Students enrolled in the course are limited to thirty (30) hours per semester.

**AED 42.06**  
**BASIC SKILLS (RANCHO)**  
*0.0 UNIT*  
Class hours: 1.0 Lecture/2.0 Laboratory  
This course is designed for students who require mediation between 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.
This course is designed to be an adjunct to Mediation in Basic Skills (M.B.S.). Focus will be upon implementation of activities determined by the student’s individual education plan developed for M.B.S. Initial emphasis may be placed on a variety of other activities designed to mediate between a student’s disability and matriculation at Cerritos.

**AED 42.09**  
**BASIC SKILLS II**  
Class hours: 3.0 Lecture  
This course is designed for limited English Language Learners who require mediation in 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 individual instruction, utilizing an instructional aide.

**AED 42.10**  
**SPANISH GED TEST PREP-A**  
Class hours: 6.0 Lecture  
This course will prepare students for the writing and social studies components of the GED examination. 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 tests.

**AED 42.12**  
**GED PREPARATION-A**  
Class hours: 6.0 Lecture  
This course will prepare students for the writing and social studies components of the GED examination. 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 tests.

**AED 42.13**  
**GED PREPARATION-B**  
Class hours: 6.0 Lecture  
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 experiences, television, radio, books and newspapers, consumer products, and advertising. Students will be prepared to take the battery of GED tests.

**AED 42.14**  
**LOW BEGINNING ENGLISH AS A SECOND LANGUAGE**  
Class hours: 6.0 Lecture  
This second course in a series is designed as a Low Beginning English as a Second Language course for those students transitioning from the Survival Level English as a Second Language course or those students with minimal English language skills. All language learning skills will be utilized: reading, writing, listening, and speaking with an increasing interest in language production and conversation.

**AED 42.15**  
**HIGH BEGINNING ENGLISH AS A SECOND LANGUAGE**  
Class hours: 6.0 Lecture  
This third course in a series is designed for those students transitioning from the Low Beginning English as a Second Language course or for those students with some English language skills. All language learning skills will be utilized: reading, writing, listening, and speaking, with an increasing emphasis on language production and conversation in preparation for future vocational and academic work.

**AED 42.16**  
**LOW INTERMEDIATE ENGLISH AS A SECOND LANGUAGE**  
Class hours: 6.0 Lecture  
This fourth course in a series is designed as a Low Intermediate English as a Second Language course for those students transitioning from the High Beginning English as a Second Language course or those students with moderate English language skills. All language learning skills will be utilized: reading, writing, listening, and speaking, with an increasing interest in language production and conversation.

**AED 42.17**  
**HIGH INTERMEDIATE ESL**  
Class hours: 6.0 Lecture  
This fifth course in a series is designed as a High Intermediate English as a Second Language course for those students transitioning from the Low Intermediate English as a Second Language course or those students with moderate English language skills. All language learning skills will be utilized: reading, writing, listening, and speaking with an increasing interest in language production and conversation. The emphasis of this course is to prepare for transitioning into the appropriate ESL Credit course.

**AED 43.00**  
**INTRODUCTION ROOFING/WATERPROOF**  
Class hours: 1.3 Lecture/0.4 Laboratory  
This course is designed to give students an introduction to the apprenticeship program for the roofing and waterproofing industry. Topics covered will include safety, use of tools and equipment, types of roofs, and structural design.

**AED 43.01**  
**COMMON ROOFING/WATERPROOF**  
Class hours: 1.3 Lecture/0.4 Laboratory  
This course covers the preparation and application of various roofing and waterproofing materials including asphalt products, elastomeric and plastic membrane, flashing materials, fasteners, and operating and maintenance of small engines.
AED 43.02
ROOFERS-CPR AND FIRST AID 0.0 UNIT
Class hours: 0.2 Lecture/0.2 Laboratory
This course on cardiopulmonary resuscitation (CPR) and standard first aid is designed to teach the knowledge and skills that are needed for the emergency care of the injured and ill until medical care can be obtained and to create an active interest in the prevention of accidents.

AED 43.03
BUILT-UP ROOF ASSEMBLIES 0.0 UNIT
Class hours: 1.3 Lecture/0.4 Laboratory
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 0.0 UNIT
Class hours: 1.3 Lecture/0.4 Laboratory
This course is on the preparation and application of cold-applied roofing systems and their related components.

AED 43.05
ROOF SHINGLES/TYPES/APPLICATION 0.0 UNIT
Class hours: 1.3 Lecture/0.4 Laboratory
This course covers the application and maintenance of various roofing shingle systems.

AED 43.06
RIGID ROOFING 0.0 UNIT
Class hours: 1.3 Lecture/0.4 Laboratory
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, REROOFING 0.0 UNIT
Class hours: 1.3 Lecture/0.4 Laboratory
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 SPECIFICATIONS 0.0 UNIT
Class hours: 1.3 Lecture/0.4 Laboratory
This course is on the development and application of plans, specifications, regulations, and cost estimating for the roofing and waterproofing industry.

AED 43.09
SINGLE-PLY ROOF/WATERPROOF 0.0 UNIT
Class hours: 1.3 Lecture/0.4 Laboratory
This course covers the application and maintenance of single-ply roofing and waterproofing systems.

AED 44.00
MASONRY I 0.0 UNIT
Class hours: 1.0 Lecture/3.0 Laboratory
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 0.0 UNIT
Class hours: 1.0 Lecture/3.0 Laboratory
This course is a continuation in the study of the fundamentals of masonry construction.

AED 44.02
MASONRY III 0.0 UNIT
Class hours: 1.0 Lecture/3.0 Laboratory
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 0.0 UNIT
Class hours: 1.0 Lecture/3.0 Laboratory
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 0.0 UNIT
Class hours: 1.0 Lecture/3.0 Laboratory
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, stonework, and residential masonry.

AED 44.05
MASONRY VI 0.0 UNIT
Class hours: 1.0 Lecture/3.0 Laboratory
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 0.0 UNIT
Class hours: 2.0 Lecture/2.0 Laboratory
Basic knowledge of fundamental grammar necessary for practical usage; spelling, punctuation, and minimum skill in writing and speaking necessary to communicate effectively and appropriately.

AED 48.02
SENIOR BOOKS COME ALIVE 0.0 UNIT
Class hours: 1.5 Lecture
This class will review and discuss the Great Books of the Western World. 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 0.0 UNIT
Class hours: 2.0 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 0.0 UNIT
Class hours: 1.5 Laboratory
This course is designed to increase receptive and expressive language skills in the senior citizen, as well as improve non-verbal body language, and develop a higher self-confidence through positive interaction with others. This course may be repeated.

AED 49.01
VOCATIONAL MATH 0.0 UNIT
Class hours: 2.0 Lecture/2.0 Laboratory
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 0.0 UNIT
Class hours: 4.5 Lecture
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 vocabulary and nomenclature, while increasing their English language acquisition by learning to ask and respond to questions related to the vocation and practice conversation on a variety of work-related subjects. Students will expand their vocational knowledge via class discussions, reading print material, attending field trips, and by sharing their vocational experiences 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 0.0 UNIT
Class hours: 3.0 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 49.04
CAHSEE MATH A PREPARATION 0.0 UNIT
Class hours: 4.0 Lecture
This course prepares students to review and pass the Math section of the California High School Exit Exam using vocational contexts for learning activities. This course specifically focuses on basic skills.

AED 49.05
CAHSEE MATH B PREPARATION 0.0 UNIT
Class hours: 4.0 Lecture
This course prepares students to review and pass the math section of the California High School Exit Exam using vocational contexts for learning activities. This course specifically focuses on Algebra skills.

AED 49.06
CAHSEE ENGLISH PREPARATION 0.0 UNIT
Class hours: 4.0 Lecture
This course prepares students to review and pass the English section of the California High School Exit Exam using a vocational context for learning activities.

AED 50.05
NTMA METALLURGY 0.0 UNIT
Class hours: 3.0 Lecture
A course designed to teach the properties of metals, selections, testing, physical metallurgy, pure metals, deformation, crystallization. Includes shaping, forming (including hot working, cold working, drawing, and welding), structure and properties of steel, carbon steel, tool steel, cast iron, copper alloys, special metals, heat treatment and power metallurgy.

AED 60.01
CITIZENSHIP I 0.0 UNIT
Class hours: 4.0 Lecture
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 ELECTRICAL TRADES 0.0 UNIT
Class hours: 3.4 Lecture/1.0 Laboratory
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 on safety and the overall aspects of this specialty industry.

AED 80.02
BASIC ELECTRICAL THEORY 0.0 UNIT
Class hours: 3.4 Lecture/1.0 Laboratory
This course 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
ELECTRICAL THEORY & APPLICATION 0.0 UNIT
Class hours: 3.4 Lecture/1.0 Laboratory
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, conductor bending, boxes and fittings, conductor installations, and cable tray.

AED 80.04
BASIC ELECTRICAL THEORY 0.0 UNIT
Class hours: 3.4 Lecture/1.0 Laboratory
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/INSTALLATIONS 0.0 UNIT
Class hours: 3.4 Lecture/1.0 Laboratory
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, overcurrent protection, raceways, box and fitting fill requirements, wiring devices, distribution equipment, and distribution system transformers.

AED 80.06
ELECTRICAL LIGHT/MOTOR & HVAC SYSTEM 0.0 UNIT
Class hours: 3.4 Lecture/1.0 Laboratory
This is the sixth course in a series of specialty courses for electrical apprentices involved in the construction industry. Emphasis will be on basic lighting, motor calculations, and motor maintenance, motor controls, electricity in HVAC system, and hazardous locations.

AED 80.07
INDUSTRIAL LIGHTING LOAD & THEORY 0.0 UNIT
Class hours: 3.4 Lecture/1.0 Laboratory
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.
involved in the construction industry. The emphasis is placed on specialty transformers, advanced controls, HVAC controls, welding machines, heat tracing and freeze protection, motor maintenance, part 2, and high voltage terminators/splices.

AED 80.09
CPR AND FIRST AID  0.0 UNIT
Class hours: 0.3 Lecture/0.3 Laboratory
This is a course of Cardiopulmonary Resuscitation (CPR) and Standard First Aid that is designed to teach the knowledge and skills that are needed for the emergency care of the injured and ill until medical care can be obtained and to create an active interest in the prevention of accidents.

AED 80.10
SHEET METAL I  0.0 UNIT
Class hours: 1.0 Lecture
This course discusses the scope and nature of the sheet metal trade including systems and methods for gauging sheet metal. It describes the types and uses of hand and layout tools as well as cutting, bending and forming machines used in the trade. Types of fasteners and common screw and bolt configurations are described. This course explains the purpose of louvers, dampers, and access doors and how they are constructed. The proper installation of duct insulating materials is covered. Problems involved with measurement lines, area, volume, weight, and geometric figures are introduced. Also provided is an explanation for the uses of parallel line development and step-by-step procedures for selected fittings.

AED 80.11
SHEET METAL II  0.0 UNIT
Class hours: 3.0 Lecture/1.0 Laboratory
This course covers problems involving the use of protractors, vernier 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, ductwork installation principles, and the use of psychrometric charts. Information and learning actives 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  0.0 UNIT
Class hours: 3.0 Lecture/1.0 Laboratory
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 are 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  0.0 UNIT
Class hours: 3.0 Lecture/1.0 Laboratory
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 particulate.

AED 80.14
HVAC I  0.0 UNIT
Class hours: 3.0 Lecture/1.0 Laboratory
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 80.15
HVAC II  0.0 UNIT
Class hours: 3.0 Lecture/1.0 Laboratory
This course instructs trainees in the properties of air distribution systems. Students will become familiar with the operation, layouts, types of equipment, and installation practices used for air distribution systems installed in the different regions of the country.

AED 80.16
HVAC III  0.0 UNIT
Class hours: 3.0 Lecture/1.0 Laboratory
This course instructs trainees in preventive maintenance of HVAC system. Students will become familiar with the different types of troubleshooting and serving of heating systems.

AED 80.17
HVAC IV  0.0 UNIT
Class hours: 3.0 Lecture/1.0 Laboratory
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 TECH I  0.0 UNIT
Class hours: 3.0 Lecture/1.0 Laboratory
This course introduces the Electronic Systems 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 TECH II  0.0 UNIT
Class hours: 3.0 Lecture/1.0 Laboratory
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  0.0 UNIT**  
Class hours: 3.0 Lecture/1.0 Laboratory  
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  0.0 UNIT**  
Class hours: 1.6 Laboratory  
This course is the beginning course for the "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  0.0 UNIT**  
Class hours: 1.6 Laboratory  
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, wires, 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  0.0 UNIT**  
Class hours: 3.2 Laboratory  
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 benders 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 termination's, splices, and the installation of electric services, circuit breakers and fuses, conductors and relays, and the basic principles of electrical lighting.

AED 80.24  
**ELECTRICAL CRAFT TRAINING - LEVEL III  0.0 UNIT**  
Class hours: 3.2 Laboratory  
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 characteristics 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  0.0 UNIT**  
Class hours: 3.2 Laboratory  
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 transformers, principles and practical applications of solid state controls, Heating and Ventilating, and Air Conditioning (HVAC) controls. A brief introduction to welding machine types and how they operate will be covered. Students will continue their training in motor maintenance techniques. An overview of high voltage terminators and splices and National Electric Code (NEC) and cable manufacturers requirement will be covered.

AED 80.26  
**SUPERVISED SCIENCE TUTORIAL  0.0 UNIT**  
Class hours: 2.0 Laboratory  
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 80.3  
**SUPERVISED COMPUTER UTILIZATION TUTORIAL LAB  0.0 UNIT**  
Class hours: 1.0 Laboratory  
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 80.32  
**COMMUNICATION DISORDERS  0.0 UNIT**  
Class hours: 2.8 Lecture  
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 80.36  
**SUPERVISED INDIVIDUAL ESL TUTORIAL  0.0 UNIT**  
Class hours: 3.0 Laboratory  
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 80.46  
**SUPERVISED INDIVIDUALIZED SPEECH  0.0 UNIT**  
Class hours: 2.8 Laboratory  
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 0.0 UNIT
Class hours: 9.0 Laboratory
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. Open entry/open exit. (Formerly NRSG 47T)

AED 90.7
SUPERVISED ASSISTANCE FOR TECHNOLOGY BASED COURSES 0.0 UNIT
Class hours: 3.0 Laboratory
This course introduces students to technology resources on campus and student use of technology for successful completion of technology-based course assignments. Special attention will be given to skills necessary for success in distance education courses. (Formerly EDT 6T/7T & READ 5T)

AED 90.91
MATHEMATICS - TUTORIAL 0.0 UNIT
Class hours: 2.0 Laboratory
Prerequisite: 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.

**ABBRIUZZESE, MARK (2005)**  
Instructor  
*Anthropology*  
B.A., California State University, Fullerton  
M.A., State University of New York, Binghamton

**ABING, JOSEPH (2003)**  
Instructor/Coach  
*Physical Education/Athletics*  
B.A., University of California, Los Angeles  
M.Ed., Azusa Pacific University

**ABORN, LUCINDA (2006)**  
Dean of Disabled Student Programs & Services  
B.A., University of California, Los Angeles  
M.A., California State University, Northridge  
Ph.D., University of Northern Colorado

**ACKLAND, DEAN (1987)**  
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M.A., Azusa Pacific

**ALBANESE, JAMES (2008)**  
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M.A., California State University, Northridge  
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**ALENIKOV, TERESA (2002)**  
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*Educational Technology*  
B.A., California State University, Long Beach  
J.D., Western State University

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**ASHE, SUZANNE (1986)**  
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*English*  
B.A., Rosary College, River Forest, IL  
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**AVILA, ARCADIO (2005)**  
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Professor  
*Court Reporting*  
A.A., Fullerton Junior College  
A.B., University of California, Berkeley  
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**BARON, TONY (1986)**  
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*Automotive Technology*  
A.A., A.S., Pierce College  
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**BARRETT, BONNIE R. (1998)**  
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B.A., Immaculate Heart College  
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**BATHKE, JULIE (2002)**  
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B.S., California State University, Long Beach  
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**BECK, ANGELA. (2004)**  
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<th>Title/Position</th>
<th>Department</th>
<th>Education</th>
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MOLYNEUX, THOMAS (2009)
Director of Economic Development
Accounting/Finance
B.A., University of California, Los Angeles
M.B.A., University of Southern California

MONTGOMERY, NANCY (2007)
Coordinator of Student Health Services
R.N., B.S.N., M.S.N., California State University, Dominguez Hills

MOORE, DEBRA (2001)
Professor
Librarian
B.A., Oberlin College
M.D.I., Andover Newton Theological School
M.L.S., University of California, Los Angeles

MORGAN, VYKKI (1992)
Professor
Court Reporting
A.A., Chaffey College
B.A., National University
M.A., Pepperdine University

MORIARTY, CYNTHIA (1992)
Professor
Business Administration
A.A., Fullerton Junior College
B.S., California State University, Fullerton
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)
Assistant Professor
Paralegal Education
A.A., M.A., University of Maryland, Baltimore
J.D., Western State University

MURGUIA, STEPHANIE (2009)
Dean of Admissions, Records and Services
A.A., Palomar College
B.A., California State University, San Marcos
M.A., University of San Diego
MYERS, CHRISTOPHER (2009)  
Interim Director of Research and Planning  
B.A., University of Texas, Austin  
M.S., Ph.D., University of Arizona

MURRAY, KODEE (2001)  
Assistant Professor/Coach  
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.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

NATIVIDAD, RACHEL (2002)  
Assistant Professor  
Nursing  
A.S., Mt. San Antonio College  
B.S., California State University, Fullerton  
M.S., University of Phoenix

NEGRETE, BERNARD J. (1981)  
Professor  
Computer and Information Sciences  
B.A., California State University, Long Beach  
M.S., National University

NELSON, DAVID W. (1986)  
Professor  
Music  
B.A., M.A., Ph.D., University of California, Santa Barbara

NGUYEN, 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

O’NEIL, SCOTT (2000)  
Instructor  
Mathematics  
B.S., University of California, Santa Barbara  
M.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., Ph.D., Claremont Graduate University

OLIVER, SUSAN (1995)  
Professor  
History  
B.A., George Washington University  
M.A., Ph.D., University of California, Los Angeles

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  
Disabled Student Programs and Services  
B.A., California State University, Long Beach  
M.A., California State Polytechnic 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

PIERINI, MICHAEL S. (1995)  
Associate Professor  
Culinary Arts  
A.A., West Los Angeles College  
B.V.E., California State University, Long Beach

PIRTLE, DIANNE D. (1997)  
Assistant Professor  
Sociology  
B.A., M.A., California State University, Dominguez Hills

PORTIGAL, STEVEN J. (1991)  
Professor  
Art and Design  
B.A., San Fernando Valley State College  
M.F.A., University of California, Los Angeles
POTTER, INGEBORG (1979)
Professor
German
B.A., M.A., California State University, Fullerton

POTTER, INGE (1979)
Professor
German
B.A., M.A., California State University, Fullerton

PRIEBE, MARY (1984)
Professor
Paralegal
A.A., Citrus College
B.A., Whittier College
M.B.A., California State University, San Bernardino
J.D., Western State University

PRICE, TERRY L. (1975)
Professor
Plastics Technology
A.A., East Los Angeles College
B.A., California State University, Long Beach

PRINDLE, JEANINE V. (1977)
Professor
Health, Physical Education/Athletics
B.A., M.A., California State University, Long Beach
M.Ed., Azusa Pacific University

QUAAS-BERRYMAN, FRANCIE (1999)
Associate Professor
English
A.A., Santa Ana College
B.A., M.A., California State University, Fullerton

REAL, YANNICK (2000)
Associate Professor
Machine Tool Technology
B.S., University of Metz
M.S., California State University, Long Beach
Eng., University of Southern California
Ed.D., Pepperdine University

REECE, BRYAN S. (1991)
Professor
Political Science
B.A., M.A., Ph.D., University of Southern California

RENTIERA, ROBERT A. (1975)
Professor
Reading
A.A., East Los Angeles College
B.A., M.A., California State University, Los Angeles
M.S., California State University, Fullerton

RICHARDSON, STEVEN (2000)
Executive Director of Foundation
B.A., Biola University

RICHEY, THOMAS (2003)
Facilities Manager
A.A., Cypress College

RIEDEL, PATRICIA (2003)
Assistant Professor
Nursing
B.S., California State University, Los Angeles
M.S., California State University, Long Beach

RIFFLE, ROBERT (2003)
Director of Physical Plant
A.A., Fullerton College
Certified School Business Management,
California State University, Fullerton

RIGBY, JEFFREY (1991)
Professor
Anthropology
B.A., M.A., University of California, Los Angeles

RIZKALLAH, BERLANTI (1981)
Director of Fiscal Services
B.S., University of Cairo, Egypt
M.B.A., National University

ROBERTSON, CHARLES C. (1994)
Professor
Automotive Collision Repair
A.A., Cerritos College
A.S., Long Beach City College
B.V.E., California State University, Long Beach

ROBLES, MARTHA (2004)
Instructor
Adult Ed/Diversity Programs
B.A., California State University, Chico

RODRIGUEZ, NORMA C. (1983)
Coordinator of CalWORKS Services
A.A., Cerritos College
B.A., M.A., California State University, Dominguez Hills

ROMAN, CHRISTINE (1981)
Associate Professor
Chemistry
B.A., M.A., California State University, Fullerton

ROMERO, VIRGINIA (1980)
Professor/Athletics Counselor
B.A., California State University, Long Beach
M.A., Azusa Pacific University
M.S., California Lutheran College

ROSE, LINDA D. (1994)
Instructional Dean, Liberal Arts
Professor, English
A.A., West Los Angeles College
B.A., M.A., California State University, Dominguez Hills
Ed.D., University of California, Los Angeles

ROSENFELD, KIMBERLY (1999)
Associate Professor
Speech Communication
B.A., M.A., California State University, Fullerton

ROTHER, EDWARD (1989)
Professor
Architecture
B.S., M.Arch., University of Illinois
M.B.A., California State University, Fullerton
Ed.D., University of Southern California

RYOZAKI, EVELYN (1990)
Professor/Counselor (EOPS)
B.A., University of California, Los Angeles
M.A., California State University, Dominguez Hills

SALAZAR, MICHAEL (1998)
People-Soft Database Administrator
A.A., Cerritos College

SALAZAR, PHILLIP (1981)
Professor/Counselor
B.A., California State University, Los Angeles
M.A., Whittier College

SAMPSON, LYNDIA (1989)
Professor
Librarian

SCHMIDT, DEBRA L. (1990)
Professor
Accounting

SERWIN, LYNN A. (1997)
Associate Professor
English
B.A., California State University, Fullerton
M.A., California State Polytechnic University, Pomona
SESTINI, SALLY (1986)
Professor
Mathematics
B.A., University of California, Los Angeles
M.S., California State University, Northridge

Assistant Professor
English
B.A., M.A., California State University, Fullerton

SHARP, MAGEY (1983)
Professor
Business Communication/Business Computerized Office Technologies
B.A., California State University, Long Beach
M.S., Pepperdine University

SHIMAZU, CHERYL (1989)
Professor
Chemistry
B.A., University of California, Irvine
M.S., California State University, Long Beach

SMITH, DANIEL (2002)
Instructional Dean, Physical Education/Athletics, Professor
B.S., M.S., Brigham Young University
Ph.D., University of Illinois

SMITH, FELICIA (2004)
Assistant Professor
Cosmetology
A.A., El Camino College
B.S., University of Southern California

SMITH, PATRICIA ROBBINS (2002)
Director of Community Education
B.A., University of California, Los Angeles
M.S., California State University, Fullerton
Ed.D., University of California, Irvine

SODEN, BARBARA A. READ (1987)
Professor
Business Communication/Business Computerized Office Technologies
B.S., College Misericordia, Pennsylvania
M.S., Marywood College

SOTO, ARMANDO (1998)
Associate Professor/Counselor
B.A., University of California, Berkeley
M.A., San Diego State University

Associate Professor/Co-Director of Forensics
B.A., M.A., University of Southern California

STAMMERJOHN, CARL (2004)
Assistant Professor
Woodworking
B.S., California Polytechnic State University, San Luis Obispo

STAPP, LESLIE E. (1999)
Assistant Professor
Philosophy
A.A., American River College
B.A., California State University, Sacramento
M.A., Ph.D., University of California, Davis

STEIN, GERALD (1992)
Professor
Paralegal
B.A., California State University, Long Beach
J.D., Southwestern University School of Law

STILES, LYNN M. (1990)
Professor
English
B.A., M.A., California State University, Long Beach

STOLZE, TED (2004)
Assistant Professor
Philosophy
B.S., Davidson College
M.A., Ph.D., Claremont Graduate University

STUART, PEGGY J. (1995)
Professor
Nursing
B.S.N., California State University, Long Beach
M.S.N., California State University, Los Angeles

SUGIHARA-CHEETHAM, JOANN (2002)
Instructor
English as a Second Language
B.S., University of California, Riverside
M.A., California State University, San Francisco

SUGIYAMA, CHRISTINE (1987)
Professor/Counselor
B.A., University of California, Los Angeles
M.A., California State University, Dominguez Hills

SWANSON, JOHN (1992)
Professor
English
A.B., University of California, Berkeley
M.F.A., University of California, Irvine

Instructor/Coach
Physical Education/Athletics
B.A., M.A., California State University, Long Beach

Professor
Welding
A.A., Cerritos College
B.V.E., California State University, Long Beach

TAYLOR, KEVIN (1992)
Professor
Automotive Technology
B.A., M.A., California State University, Long Beach

TEPLITZKY, JESSE (2008)
Instructor/Coach
Physical Education/Athletics
B.A., Metro State College of Denver
M.A., University of North Colorado

TROUP, JACQUELYN A. (1991)
Professor
Sociology
B.A., M.A., Pepperdine University

UKITA, TRACI (2001)
Assistant Professor
Art History
B.F.A., Rhode Island School of Design
M.F.A., Bard College

VALENZUELA, RAUL (1990)
Associate Professor/ EOPS Counselor
B.A., University of California, Irvine
M.S., California State University, Fullerton

VAN DE MORTEL, JOSEPH (1988)
Associate Professor
Philosophy
B.A., California State University, Fullerton
M.A., University of San Francisco

VASQUEZ, GARCIELIA (1994)
Director of Adult Education/ Diversity Programs
B.A., M.A., University of California, Los Angeles

VEGA, FRANK (2005)
Instructor
Automotive Mechanical Repair
A.A., Cerritos College
B.A., University of La Verne
VOORHIES, ANN (2002)  
Assistant Professor  
Nursing  
A.S., Purdue University  
B.S., California State University, Dominguez Hills  
M.S., California State University, Long Beach

WALDMAN, LINDA S. (1997)  
Assistant Professor  
Chemistry  
A.S., Cypress Community College  
B.S., California State University, Long Beach  
M.S., Ph.D., University of California, Irvine

WALLACE, MARK L. (2006)  
Director of Public and Governmental Relations  
B.A., California State University, Fresno

WALTHER, ROBERT S. (1992)  
Professor  
Microbiology  
B.S., M.S., University of Southwestern Louisiana  
M.A., University of California, Los Angeles

WARD, DEBRA SUE (2007)  
Director of Child Development Center  
B.A., University of Redlands  
M.S., University of La Verne

WATANABE-LONSBURY, SUSAN (1991)  
Professor  
Theatre Arts  
B.A., California State University, Dominguez Hills  
M.F.A., University of Southern California

WEDELL, DONNA (2004)  
Instructor  
Dental Assisting  
A.S., Rio Hondo College  
B.V.E., California State University, Long Beach

WELL, GEORGIA (1983)  
Professor  
Theatre Arts  
A.A., Bakersfield College  
B.A., M.A., California State University, Long Beach

WELLIVER, KAREN M. (1988)  
Professor/Coach  
Health, Physical Education/Athletics  
B.A., M.S., California State University, Long Beach

WELLS, DOUGLAS (1989)  
Professor/Coach  
Physical Education/Athletics  
B.S., M.S., University of Utah

WESTBY, KIM (1985)  
Dean of Student Support Services  
A.A., Cerritos College  
B.A., California State University, Dominguez Hills  
M.S., University of La Verne

WHITE, BRENDA J. (1993)  
Professor  
Cosmetology  
B.A., Union Institute

WHITSON, BEVERLY (1984)  
Professor  
English  
A.A., Cerritos College  
B.A., M.A., California State University, Fullerton

WILSON, CHRISTOPHER (2000)  
Associate Professor  
Art and Design  
B.A., University of California, Irvine  
M.F.A., Loyola Marymount University

WILSON, JACK (1999)  
Assistant Professor  
Computer and Information Sciences  
B.A., M.S., California State University, Fullerton

WISSA, FARID E. (1988)  
Professor  
Engineering Design Technology  
A.A., Cerritos College  
B.V.E., M.A., California State University, Long Beach

WORREL, DARA (2004)  
Assistant Professor  
Mathematics  
B.S., M.S., California State University, Long Beach

YABROFF, ALLISON (2006)  
Assistant Professor  
Biological Sciences  
B.S., M.A., Ph.D., University of California, Los Angeles

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  
M.A., Michigan State University

YOUNG, DAVID A. (1987)  
Professor/Counselor  
B.A., California State University, Northridge  
M.A., University of California, Los Angeles  
Ph.D., University of Southern California

ZEWAIL, MERVAT (1984)  
Professor  
Chemistry  
B.S., University of Alexandria, Egypt  
Ph.D., University of Pennsylvania
<table>
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<th>Faculty Emeriti</th>
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<td>ADAMS, KEITH</td>
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<td>Dean of Vocational Education/Extended Day</td>
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<td>BAXTER, DORRIS</td>
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<tr>
<td>(1957-1984)</td>
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<tr>
<td>Chemistry</td>
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<td>BLOOMFIELD, EDWARD H.</td>
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<td>Philosophy</td>
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<td>AGUIRRE, RUDOLPH</td>
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<td>(1959-1987)</td>
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<td>Art</td>
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<td>BAYER, CONNIE</td>
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<td>(1966-2002)</td>
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<td>Health and Physical Education</td>
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<td>BLUSKE, MARGARET</td>
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<td>(1958-1979)</td>
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<td>German</td>
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<td>BEALE, Darryl</td>
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<td>(1973-2009)</td>
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<td>Psychology</td>
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<td>BOCK, FRANK</td>
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<td>(1961-1988)</td>
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<td>Anthropology/Theatre</td>
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<td>ALLEN, ROBERT</td>
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<td>(1965-1991)</td>
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<td>Business-Accounting</td>
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<td>BEAM, ROGER D.</td>
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<td>(1975-1993)</td>
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<td>Automotive Technology</td>
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<td>BOCK, FRANK</td>
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<td>(1971-1998)</td>
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<td>Physical Education/Athletics</td>
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<td>ANDERSON, LOWELL</td>
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<td>(1962-2003)</td>
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<td>Real Estate</td>
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<td>BEHRENDS, SHARON</td>
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<td>(1976-1996)</td>
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<td>Nursing Education</td>
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<td>BONycastle, WILLIAM L.</td>
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<td>(1960-1984)</td>
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<td>English</td>
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<td>ANGLE, NANCY</td>
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<td>Mathematics</td>
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<td>BOODNICK, ALLAN</td>
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<td>(1965-1991)</td>
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<td>Counselor</td>
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<td>ARCHER, DONNY</td>
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<td>(1961-1981)</td>
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<td>Mathematics</td>
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<td>BOS, ROBERT KEMP</td>
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<td>Counselor</td>
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<td>AUSTIN, ANTHONY</td>
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<td>(1980-2009)</td>
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<td>Electronics</td>
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<td>BETZ, CHARLES R.</td>
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<td>(1962-1998)</td>
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<td>Economics</td>
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<td>BOYLE, JOHN</td>
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<td>Biology</td>
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<td>BAIRD, MARGARET W.</td>
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<td>(1965-1983)</td>
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<td>BRADY, LAWRENCE</td>
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<td>(1970-1999)</td>
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<td>Instructional Dean, Fine Arts and Communications</td>
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<td>BAKER, EVERET D.</td>
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<td>Chemistry</td>
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<td>BEYKIRCH, HELEN M.</td>
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<td>Technical Mathematics</td>
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<td>BALEY, JOHN D.</td>
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<td>Mathematics/Computer Science</td>
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<td>BLACK, JOHN G.</td>
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<td>Accounting</td>
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<td>BRODERICK, WILLIAM E.</td>
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<td>Machine Tool/Plastics Technology</td>
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<td>BUFALINI, ELVIDIO G.</td>
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<td>Counselor</td>
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<td>BARKER, MATILDA</td>
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<td>(1989-2000)</td>
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<td>Sociology</td>
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<td>BLACK, RHEA G.</td>
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(1966-1999)  
Spanish

JENNINGS, STANLEY  
(1957-1985)  
History

KIEFFER, KEPNER K.  
(1984-2006)  
Accounting

HUBER, ROBERT C.  
(1988-2009)  
Theatre Arts

JEPPESEN, JACK  
(1964-1982)  
Economics

KINCAID, WALLACE  
(1957-1989)  
Physical Education

HUBRECHT, GLENN  
(1975-1991)  
Electronics

JOHNSON, CARL  
(1958-1976)  
Librarian

KLEIN, WERNER  
(1960-1976)  
Dental Assisting

HUFFMAN, JOAN  
(1963-1991)  
Biology

JOHNSON, WILLIAM  
(1971-1991)  
Physical Education

KLEINERMAN, JOSEPH  
(1957-1987)  
Counselor

HUGHLETT, ROBERT  
(1973-2005)  
Director, Disabled Student Programs & Services

JONES, BETTY LOU  
(1965-1989)  
Librarian

KORF, LEE  
(1958-1982)  
Theatre Arts

HUMISTON, GENEVIEVE  
(1957-1960)  
Dean of Admissions

JONES, MARGIA  
(1974-1979)  
Business Education

KORSMIEIER, HENRY F.  
(1956-1969)  
Assistant Superintendent, Business

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

INCORVAIA, JOSEPH  
(1958-1978)  
Business

KARVELIS, DONALD  
History

LAHRS, WILLIAM E.  
(1965-1983)  
Office Occupations

JACKSON, JOHN  
(1957-1991)  
Automotive Technology

KASTAN, CYNTHIA  
(1979-2009)  
Art and Design

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, DEARESTN  
(1968-1991)  
Special Education

JENKINS, SARAH  
(1959-1989)  
Librarian

KETELLE, WILLIAM  
(1975-1992)  
Furniture Manufacturing Technology

LAYTON, DONALD W.  
(1962-1989)  
Earth Science
LEVI, LINDA  
Art

LEWIS, WILLIAM  
(1962-1989)  
Speech Communications

LICARI, JOAN  
(1966-2001)  
Geology

LITTLETON, OSCAR  
(1958-1979)  
English

LOPEZ DEGAINES, CHRISTINA  
(1976-2007)  
Counselor

LUCAS, STANLEY  
(1976-1991)  
Automotive Technology

LUNDBRINK, AUSTIN  
(1965-1989)  
Accounting

MADDEEN, 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

MARTINEZ, ORLANDO  
(1991-1999)  
Spanish

MARTINEZ, RUBEN  
(1966-1991)  
Spanish

MASTALER, RUDY  
(1976-1987)  
Technical Mathematics

MAYS, GLADYS  
(1964-1979)  
Mathematics

MCANINNIS, 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, IYMAN 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

MOSES, SHERILL  
(1963-1989)  
Philosophy/Political Science

MYERS, ARLENE  
Business

NEFF, JOHN  
(1959-1982)  
Anatomy and Physiology

NELSON, C. THOMAS  
(1974-1996)  
Journalism

NEW, BILL  
(1964-1997)  
Mathematics

NEWMAN, FRAN  
(1972-1992)  
Vice President of Student Services

NEVILLE, KENNETH C.  
(1965-1986)  
English/Spanish

NOGLE, DONALD G.  
(1957-1986)  
Counselor

NORMAN, DAVID  
(1965-1974)  
Data Processing

NUPTALL, 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
Faculty Emeriti

PASCOE, RAYMOND  
(1961-1989)  
Mathematics

PYKA, ANDREW J.  
(1963-1976)  
Engineering and Mathematics

SAUCEDO, MARCELINO  
(1972-1993)  
Counselor

PATRICK, CAROL  
(1997-2006)  
Dean of Counseling Services

REECE, JOHN A.  
(1964-1988)  
Administration of Justice

SCHAUERBURG, GARY  
Psychology

PELONI, JR., JOHN  
(1989-2000)  
Cosmetology

REGAN, PATRICIA  
(1974-1994)  
Medical Assisting

SCHUTZ, JOAN  
(1957-1979)  
Division Chairman, Health, P.E. and Recreation

PENDELOTON, WILLIAM C.  
(1960-1988)  
Physical Education

REW, WAYNE  
(1970-1999)  
Counselor

SCOTT, DICK  
(1957-1980)  
History

PERALTA, TRUDY B.  
(1990-2007)  
English

RINGWALD, SIEGFRIED  
English/Law

SCOTT, LACRETA  
(1984-2002)  
English

PERRINS, SHERRY  
(1979-2006)  
Court Reporting

ROBERTS, CECIL  
(1971-1979)  
Librarian

SCOTT, OLIVE P.  
(1959-1986)  
Vice President for Instructional Services

PERRY, JAMES R.  
(1961-1997)  
Chemistry

ROBERTS, EDITH  
(1960-1980)  
Physical Education

SEELEY, GEORGE  
(1959-1988)  
Physics

PIORKOWSKI, MARIJEAN  
(1977-2009)  
Coordinator of Student Health & Wellness

ROBERTS, LYNDA  
(1989-2008)  
Child Development

SEWELL, DONALD  
Counselor

PLOWMAN, LOIS  
(1965-1982)  
Business

ROBINSON, ELLIS  
Culinary Arts

SHARPE, DOLLIE  
(1979-2001)  
Cosmetology

PORTER, STANLEY  
(1964-1991)  
Music

ROBINSON, RICHARD B.  
(1965-1986)  
Associate Dean, Student Activities

SHAW, FRANK  
(1966-1982)  
Administration of Justice

POTTER, RAYMOND  
(1962-1989)  
Counselor

RODRIGUEZ, ANTONIO  
(1968-1989)  
Speech Communication

SHAWVER, LOUIS REED  
(1965-1984)  
Industrial Supervision

POWERS, LELA  
Office Skills

RODRIQUEZ, PHILLIP  
(1974-2008)  
English

SHOPFNER, JERRY  
Autobody

POWERS, WILLIS  
(1959-1979)  
Mathematics

SAFERITE, ELWYN  
(1957-1981)  
General Business and Accounting

SHAW, FRANK  
(1957-1989)  
Physics

PRATT, JOAN  
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Nursing

SANSON, DORIS  
(1961-1979)  
Division Chairman, Health Occupations

SIEGEL, ALLAN B.  
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English
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<td>(1961-1983) Art</td>
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# Classified Employees by Area

## ACADEMIC AFFAIRS
- Boyol, Maria
- Castro, Monica
- Chambers, Pamela
- Douglas, William
  - B.S., University of Phoenix
- Evans, Lee
- Gallant, John
- Kristina, Laurie
- Liang, Ivy
- Stevens, Victoria
- Tolson, Miriam

## ADMISSIONS, RECORDS AND SERVICES
- Alegre, Rose
- Badzey, Paul
  - A.A., Cerritos College
- Bernabe, Del Finna
- Boss, David
- Boss, Sue
  - A.A., Cerritos College
- Campbell, Christina
  - A.A., Cerritos College
- Cary, Joan
  - A.A., Cerritos College
- Ear, Joe
  - A.A., Cerritos College
  - A.A., Long Beach City College
- England, Micki
- Ladmirault, Barbara
- Mejia, Natasha
- Otero, Kathleen
- Pendleton, Benjamin
- Torres, Theresa
- Valles, Lisha

## BUSINESS EDUCATION
- Cooper, Johnny
  - A.A., Cerritos College
  - B.S., M.A., Azusa Pacific University
- Estrada, Shannon
- Gutierrez, Veronica
- Gutierrez, Rochel
- Mejia, Natasha
- Otero, Kathleen
- Pendleton, Benjamin
- Torres, Theresa
- Valles, Lisha

## BUSINESS SERVICES
- Kaufman, Linda

## CALWORKS SERVICES
- Rodriguez, Marina
- Ybanez, Regina

## CAMPUS POLICE
- Alban, Randy
- Barron, Jairzinho
- Brush, Tom
- Bustamente, Ricardo
- Castillo, Angel
- Chavez, Mario
- Dawkins, Michelle
- Echevarria, John
- Jamison, Cary
- Komadina, Debra
- Marquez, Ana Maria
- Ramirez, Terri
- Rios, Santiago
- Rodriguez, Estel
- Velazquez, Carlo

## CAREER AND ASSESSMENT SERVICES
- Estrada, Shannon
- Mota, Maria Luisa
- The, Christina
  - A.A., Cerritos College
- B.A., California State University, Fullerton
- M.B.A., California State University, Dominguez Hills
- Vasquez, Rosario

## CHILD DEVELOPMENT CENTER
- Feist, Astrid
- Gonzalez, Debora
- Lopez, Nikki
- Martuccio, Leticia
- Popiel de Cazaux, Reena

## COMMUNICATION CENTER
- Garcia, Carmen
- Pesanti, Shelley

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- Dellimagine, Trudy
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- Heapy, Suzanne
- Hogue, Kathy
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- Martinez, Daryabeth
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- Nishimura, Leslie
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- Preece, Robin
- Tovar, Tisha – Stephanie
- Williams, Manser, Danyelle
- Yorke, Carla
- Valenzuela Acosta, Sylvia

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- Bello, Francesca
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- Pang, Rebecca
- Towhid, Kristen

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- Bulanek, Judith
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- Valdivia, Daisy

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- Contreras, Robert
- Cortez, Jose
- Cruz, Claudia
- Flores, Daniel
- Garcia, Jesus
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M.S., University of Phoenix
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WINNERS, MARGO

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KIM, YOUNG

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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 drugs or alcohol by students and employees on campus or as part of any of its activities. (Board Policy 3550)

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. Career Services Center
5. Student Health Services

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 Services, ext. 2321
3. Adult Re-Entry, ext. 2362